MINISTRY OF HEALTH OF UKRAINE
ODESA NATIONAL MEDICAL UNIVERSITY

SIMULATED PATIENT

Textbook

Edited by professor Valeriia Marichereda

Odesa • 2023 • Oldi+

UDC 616-052-048.63(075.8)
S37

Reviewers:

Vdovychenko Yurii Petrovych – doctor of medical sciences, professor, corresponding member of the National Academy of Medical Sciences of Ukraine, Honored Doctor of Ukraine, first vice-rector, P. L. Shupyk National University of Health Care of Ukraine;

Gerush Ihor Vasyliovych – doctor of medical sciences, professor, vice-rector for scientific and pedagogical work, Bukovinian State Medical University;

Petrikonis Kestutis – doctor of medical sciences, professor, vice-rector for scientific and pedagogical work, Lithuanian University of Health Sciences

Authors:

O. P. Rogachevskyi, M. P. Pervak, O. S. Yehorenko, Yu. Ye. Belozertseva-Baranova, V. I. Onyshchenko, D. F. Karakonstantyn, A. L. Dobrovolskyi

Recommended for publication by the Academic Council of the Odesa National Medical University, Ministry of Health of Ukraine (Protocol No. 5 dated 30.03.2023)

Simulated patient : a textbook / O. P. Rogachevskyi, M. P. Pervak, O. S. Yehorenko et al. ; ed. by professor Valeriia Marichereda. – Odesa : Oldi+, 2023. – 100 c.

S37

ISBN 978-966-289-679-4

The textbook covers the basic principles of organizing the educational process involving standardized patients.

For heads of secondary and higher medical educational institutions, teaching staff, and working groups on the implementation of the "Simulated patient" method.

UDC 616-052-048.63(075.8)

ISBN 978-966-289-679-4

CONTENTS

ABBREVIATIONS 5

INTRODUCTION 6

Chapter 1 **LEGAL ASPECTS OF IMPLEMENTING THE "SIMULATED PATIENT" PROGRAM** 9

Chapter 2 **HISTORY OF THE METHOD** 11

Chapter 3 **BASIC CONCEPTS AND TERMINOLOGY** 13

Chapter 4 **CLASSIFICATION OF STANDARDIZED PATIENTS CONSIDERING AMEE RECOMMENDATIONS** 16

Chapter 5 **THE MAIN STANDARDS FOR FORMING THE BASE OF STANDARDIZED PATIENTS ACCORDING TO THE RECOMMENDATIONS OF AMEE AND ASPE** 21

Chapter 6 **RECRUITMENT OF SIMULATED PARTICIPANTS FOR EFFECTIVE IMPLEMENTATION AND DEVELOPMENT OF THE PROGRAM** 31

Chapter 7 **ORGANIZATION AND MANAGEMENT OF THE "SIMULATED PATIENT" PROGRAM** 35

Chapter 8 **TYPES OF SIMULATION WITH INVOLVING SIMULATED PATIENTS** 40

Chapter 9 **DEVELOPMENT OF THE SIMULATION SCENARIO AND THE ROLE OF THE SIMULATED PATIENT** 53

Chapter 10 **PSYCHOTYPED SIMULATED PATIENT. ACQUISITION OF PROFESSIONAL COMMUNICATION AND SOFT SKILLS** 56

Fragments of the scenario and the suspicious patient's roles 65

Chapter 11 **PSYCHOLOGICAL SUPPORT OF STANDARDIZED PATIENTS** **71**

Chapter 12 **TECHNICAL REQUIREMENTS FOR THE ORGANIZATION OF THE TEACHING PROCESS** **75**

QUESTIONS FOR SELF-CONTROL **78**

REFERENCES **80**

APPENDICES **84**

Appendix A. Additional Means of Simulation when Using a Simulated Patient **84**

Appendix B. Plan of Creating a Simulation Scenario **91**

ABBREVIATIONS

AMEE – Association for Medical Education in Europe
ASPE – Association of Standardized Patient Educators
ASPiH – Association for Simulated Practice in Healthcare
GEPP – Gynecological educational professional patient
GTA – Gynecological Teaching Associate
INACSL – The International Nursing Association of Clinical and Simulation Learning
PI – Patient-instructor
SESAM – Society for simulation in Europe
SOBP – Standards of Best Practice
SSH – Society for Simulation in Healthcare
USMLE – United States Medical Licensing Examination
EPC – Educational and production complex
OSCE – Objective structured clinical exam

INTRODUCTION

Today the problem of high-quality mastering of practical skills and professional competencies is one of the most acute problems of higher medical education in Ukraine. Legal and ethical aspects significantly limit students' access to patients in clinical settings. A student does not have the opportunity to master complex competencies in the real conditions of a medical institution – his admission to a seriously ill patient is even more limited for objective reasons. The situation with interns is somewhat better, but there are quite a lot of limitations in mastering complex skills and communicating with "difficult patients".

When hiring, employers, like patients, want to see a professional who fully masters the necessary number of skills but not a young inexperienced doctor who continues his training at the workplace and deals with the most of the manipulations for the first time, and who needs to be trained a few more years after the end of the internship. So, today there is no doubts that simulation technologies should be an integral part of the modern training of a highly qualified doctor.

Practising skills on mannequins, robots, simulators and virtual patients certainly increases the level of training. However, the limitation of funding opportunities for a powerful base of medical simulators, which with intensive use wear out quickly and require constant updating, the inability to completely replace the process of communication and examination of a real patient, even with the most complex and realistic works, forces us to look for new ways and approaches to the methodology and didactics of the educational process in medicine.

Even with access of medical students to real patients at the university clinic, the teacher cannot provide a 100 % control of the correctness of the skills in all the students. This is practically impossible:

- there are not enough patients giving a consent to communicate with students;
- insurmountable ethical obstacles when real patients communicate with students (the vast majority of patients, even after giving consent are not ready for an open talk with students by certain issues);

- a limited academic time for individual teacher's work with each student;
- a limited academic time to conduct a complete clinical examination of each patient.

Taking into account that today all educational programs have a competency-based approach, being student-centered and primarily focused on the acquisition of high-quality professional competencies, and taking into account the global experience of solving the issues of acquiring professional competencies by young doctors, in particular communication skills, general examination and physical examination, one of the most effective ways is to introduce the institute of simulated patients into the educational process at all levels (from nurses to trainee doctors).

Although the use of simulated patients has certain disadvantages, the main of which are cost (the methodology requires special personnel and financial resources) and "inauthenticity", these disadvantages are overcome and fundamentally do not affect the social significance of the advantages and the positive final economic effect (significant reduction of time and finances for the training of a qualified specialist). According to world experience, the cost of creating and maintaining the functioning of an institute of simulated patients is much lower than the constant updating of the necessary number of highly realistic simulator robots. As for "inauthenticity" – many studies show that well-trained standardized patients are practically indistinguishable from real patients. For example, Beullens (1997) described studies that found that standardized patients who anonymously visited a doctor with real patients were detected only in 0–18 % cases. At the same time, in most cases, detection occurred only when specifying the number of the insurance policy or some passport data already at the end of the attendance.

This textbook defines the main concepts of the "Simulated patient" methodology, gives recommendations for its implementation, describes the main steps of creating a database of simulated patients, their preparation for work, the use of the methodology in the educational process and during exams, criteria for evaluating the quality of services provided by simulated patients, criteria for evaluating the acquisition of practical skills by education seekers and their acquisition of professional competences

using this methodology on the example of its implementation at the Odesa National Medical University (ONMedU). The "Simulated patient" method is an integral part of the educational process and a component of the Objective Structured Clinical Examination (OSCE) at ONMedU, in particular during quarantine measures and distance learning during martial law.

The "Simulated patient" method is a modern and effective tool for mastering and evaluating certain knowledge-skills by medical students, which provides an opportunity to check their professional competence and the integrity of clinical thinking, which cannot be evaluated by other traditional forms of assessment, in particular: communication skills, skills physical examination and general examination of the patient, reproduction of common, non-standard and complex clinical cases.

We do not diminish the importance of medical simulators, robots and mannequins for training a medical professional. The main task of this publication is to find a worthy place for a standardized patient in the system of simulation training in medical education in Ukraine, which is not opposed to simulators, but significantly complements them and removes their shortcomings.

Chapter 1
LEGAL ASPECTS OF IMPLEMENTING THE "SIMULATED PATIENT" PROGRAM

1. Law of Ukraine No. 2145-VIII "On Education" dated September 5, 2017.
2. Law of Ukraine No. 1556-VII "On Higher Education" dated July 1, 2014.
3. Resolution of the CMU dated April 29, 2015 No. 266 "On approval of the list of fields of knowledge and specialties for which higher education applicants are trained" (with changes and additions).
4. Resolution of the CMU of January 20, 1998 No. 65 "On approval of the Regulation on educational and qualification levels" (degree education).
5. Resolution of the CMU No. 302 dated March 27, 2018 "On approval of the Procedure for conducting a unified state qualification exam for holders of a master's degree in the field of knowledge "Health Care".
6. State standards of higher education.
7. Order of the Ministry of Health of Ukraine No. 35 dated 24.02.2000 "On approval of the regulations on the peculiarities of graduate education in the medical field" (registered in the Ministry of Justice of Ukraine on 26.06.2000 under No. 370/4591).
8. Order of the Ministry of Health of Ukraine dated February 19, 2019 No. 419 "On approval of the procedure, conditions and terms for the development and conduct of a unified state qualification exam and criteria for evaluating the results" (registered in the Ministry of Justice of Ukraine on March 20, 2019 under No. 279/33250).
9. Orders and instructions of the Ministry of Education and Science of Ukraine.
10. Qualification standards.
11. Educational-professional programs at the ONMedU.
12. Regulation on the organization of the educational process at the ONMedU.
13. Regulation on standardized patients at the ONMedU.
14. Recommendations of the Association for Medical Education in Europe (AMEE).

15. Recommendations of the Association of Standardized Patient Educators (ASPE).

16. Recommendations of the National Board of Medical Examiners (NBME).

17. Standards of the International Nursing Association of Clinical and Simulation Learning.

Chapter 2
HISTORY OF THE METHOD

The use of pre-trained actors as "patients" in medical education dates back to the 60s of the 20th century. The pioneer and real "guru" of this approach was the world-famous Howard Barrows, a professor of neurology at the University of South Carolina (USA). The role-playing games he proposed to teach and evaluate the clinical and communication skills of students, in which ordinary citizens were involved, made a real revolution in medical education at that time. Over the past sixty years, the technique has changed significantly from the actor's imitation of individual symptoms of the disease to the simulation of whole "performances" with several participants (the patient, his loved one, another medical professional, etc.), which was also facilitated by the enthusiasm and creative approach of Howard Barrows.

The first such actor-patients were called "programmed patients" by H. Barrows himself. The first programmed patient prepared by him in 1963 simulated the history and examination results of a patient with multiple sclerosis complicated by paraplegia. Besides of the clinical simulation, the patient evaluated the student's work according to the so-called "checklist", which was also developed by H. Barrows within the framework of the proposed methodology. Due to its relative simplicity and high informativeness, this method had a rapid spread and many supporters.

Already in 1970, at the University of Arizona, Dr. Paula Stillman created a group and called it "simulated patients". Local actors trained by her simulated clinical situations on behalf of the mothers of fictional sick children. The main skills that allowed her to master and control her technique were: the ability to make a conversation with the mother of a sick child, collecting all components of the anamnesis with their further interpretation and conducting differential diagnosis.

Since 1984, a number of medical schools in the north-eastern United States have implemented the use of patient actors, which have been termed "standardized," in the qualifying examinations at the end of their residency programs. Since then, the term "Standardized patient" (SP) has replaced "programmed" and "simulated" patients in many educational settings.

Following US medical schools, the Medical Council of Canada in 1993 was the first in the World to introduce standardized patients into official qualifying examinations for obtaining a medical license. This practice was quickly spread in many countries, including the United States. Since 1998, the US Education Commission has introduced a clinical skills exam using standardized patients to confirm the diploma of graduates of foreign educational institutions. This exam was later transformed into the USMLE Step 2 Clinical Skills and became mandatory for medical licensure in the US and for American students.

As for terminology, since the 90s, the most common name for actors (animators) who participated as patients in the educational process and evaluation has become the term "standardized patient", which was denoted by the abbreviation "SP". This designation of a standardized patient is currently accepted in most countries of the world, so we suggest its use in Ukraine as well. We use both terms ("standardized" and "simulated" patient), which we will explain in the following chapters.

In 30 years after the first use of an actor as a patient, in 1993, Howard Barrows, based on his own experience and the experience of other medical schools, formulated the advantages of SP in relation to real patients: accessibility, flexibility, standardization of simulation of the clinical situation, the possibility repeatedly and identically reproduce a standard clinical case, absolute safety of the learning environment for the patient and student, feedback from the SP that cannot be provided by a real patient.

The main general conclusion reached by all researchers of medical schools in Europe, the USA, and Canada, who work in the field of medical education methodology, is that the training of a future doctor should not begin at the bedside of the patient, but with training certain skills at the preclinical stage, which today it is impossible to imagine without the participation of actor-patients.

Chapter 3
BASIC CONCEPTS AND TERMINOLOGY

The most common and universally accepted term for an actor or animator playing the role of a patient is "standardized patient". But there are some peculiarities of terminology related to the classification of simulated patients, which we want to dwell on to prevent further misunderstanding.

Simulation training has become an integral component of modern high-quality professional training of a doctor. Simulation technologies make it possible to reproduce a model of professional activity, with the opportunity for each student of education to master and perform a separate element of it, or their combination, in accordance with professional standards of providing medical care without risk to the patient. The "Simulated patient" method is one of the most important components of modern simulation training in medicine.

By "simulated patient" we mean a healthy person who has acting skills and is trained to reproduce a diseased state (complaints, characteristic motility, psycho-emotional state, individual symptoms of the disease, etc.) in a realistic way.

By "standardized patient" we mean a simulated or real patient who is trained to reproduce a disease state in a standardized way.

According to the generally accepted understanding, "simulation" is an attempt to reproduce reality. In medical education, simulation reproduces some important aspects of the clinical situation to facilitate their understanding and mastery of the algorithm for managing this situation in real clinical practice. The term "simulation" in this textbook is one case of patient communication with a student or cadet.

Regarding terminology, our understanding of the terms of the technique is consistent with the definitions in the Society for Simulation in Healthcare's (SSH) Healthcare Simulation Dictionary. According to this Dictionary, all participants in the simulation of a clinical situation are "simulated participants": both the actor who plays the patient, his partner and the student himself who plays the role of a doctor or nurse.

Besides, today in the "industry" of standardized patients, depending on their functions, are allocated:

– standardized patients (simulates all types of patients directly);

– partners of patients, or "simulated participants" (the actor imitates the mother of a sick child, a family member of an adult sick person, a medical worker, a lawyer of a dissatisfied patient, etc.);

– make-up artists – help the actor to simulate certain symptoms that require additional make-up (swelling, bruises, skin rash, purulent discharge, etc.);

– patient managers (who take part in the selection of applicants for the role of a standardized patient, create a work schedule and coordinate the use of direct patients in individual scenarios);

– methodologists (experienced teachers of the educational institution who form clinical patient cases for training and work of standardized patients, partners of patients, make-up artists);

– teachers (those who directly conduct classes with students and cadets involving standardized patients, work on the development of the SP methodology and are responsible for the administration of the SP-based simulation);

– SP instructors (employees of the educational institution who are engaged in the appropriate and proper training of actors);

– SP examiners (experts) who have special skills in evaluating examinations with the participation of SPs.

The realism of the simulation is the accuracy of imitating reality. The realism of the simulation is divided by levels:

• Low fidelity simulation: simulations in this category seem the least realistic. Regarding the use of simulated patients, this category includes a simple simulation for students to master the technique of propaedeutic skills (general examination, palpation, percussion, auscultation) without identifying individual symptoms.

• Mid-fidelity simulation: these simulations are more realistic. Regarding the practice of simulated patients, they are used mainly in the "hybrid patient" methodology with the additional use of dummies and simulators. Examples include procedures such as using a simulator arm for intravenous drug administration, or an intramuscular injection simulator, or inserting a Foley catheter.

• High fidelity simulation: this simulation is the most realistic with maximum interaction of the student (cadet) with the patient in an environment that closely resembles reality. There are several rules for high fidelity simulation:

1. "If you think you are there – you are there." Your brain doesn't care if the situation is real or simulated – it produces the same reactions, emotions and sensations, at the same speed, in the same sequence, with the same force.

2. In a simulated situation, each participant must always act as they would in real life.

3. Communication in a simulated situation should always be the same as in real life.

4. The reproduction of the environment for the situation should be as realistic as possible in terms of lighting, sounds, and visual images:

– if the environment for this case is loud (car track, combat) in real life, make it loud in the simulation as well;

– if the situation occurs at night, turn off the lights;

– if there is a fire in the situation, simulate the smell of smoke;

– if the scenario requires constant monitoring of vital indicators, provide the presence of a simulator monitor.

Chapter 4
CLASSIFICATION OF STANDARDIZED PATIENTS CONSIDERING AMEE RECOMMENDATIONS

The optimal distribution of patients' "roles" is fundamental importance for providing the highest quality of the educational process using simulated patients. Active discussions on this issue are still ongoing around the world. To implement the most modern achievements of the technique, we used the experience of the most experienced specialists of the ASPE and the Association for Medical Education in Europe (AMEE).

There are several approaches to classifying standardized patients. For a more detailed understanding, consider them all.

According to the volume of modeling, the following are distinguished:

– standardized patients (all functions refer exclusively to the abilities of an actor);

– hybrid patients (combination of symptoms simulation and use of simulators to add individual clinical data, such as a gynecological examination);

– pseudo-patients (the actor imitates a healthy person with borderline mental disorders, or a patient-simulant);

– imitated ("non-standardized") patients (actors are involved in mastering certain skills in cases when there is a need to move away from rigid standards of behavior and create more flexible and authentic scenarios).

"Simulated" and "standardized" patients

The most common definition of SPs was proposed by Wind et al. (2004) and is used by AMEE: "This is a layperson trained to realistically depict a patient with a particular condition". At the same time, one of the most important requirements for SPs was formulated by Norman back in 1983: "If the SP has received quality training, experienced clinicians should not distinguish him from a real patient who has the same problem.".

In 1998, Collins and Harden provided a description of the different types of SPs that were recommended by AMEE for use. This description considered not only the scope of SPs training, but also the step-by-step acquisition of skills by the student/cadet during training:

1. SP for mastering the simplest skills by junior year students. These SPs are given only an outline of what is expected of them (eg, in situations such as a physical examination or a separate physical examination manipulation where student-patient interaction is minimal).

2. SP for mastering complex skills (for senior students). Such SP are given a brief description or scenario that they must familiarize themselves with, but beyond which they are free to respond as they wish (the simulation is adapted to the patient's own experience). This type of SPs may present with a specific set of symptoms and medical history, but his professional and social/family circumstances may be his own. Box 1 (from AMEE guidance) provides an example of this type of role.

3. SP for reproduction of a complete clinical case (for 6th year students, interns, trainee doctors). He is a person who has undergone intensive training, and whose every answer is carefully thought out and rehearsed.

An example of a simple SP role where patients use their own history to supplement a "simulated" medical information (based on AMEE)

You have consulted a doctor about the following problem:

• The skin on your hands is red, itchy, dry, and painful, especially around the joints where the skin is now cracking.

• You have had this situation during the past few years, but in the past the symptoms disappeared quickly after using creams given to you by friends.

• This outbreak lasts for several months and does not disappear with the use of creams used before. Also, the symptoms did not respond to the new Betnovate cream that you borrowed from a friend.

• You have no other symptoms or skin problems of the other location.

Background

• You (use your name and age).

• You are a barber/hairdresser. This involves the use of chemicals such as hair dye and perm lotion.

• Home and family – use your private information. Health and other medicines – use your private information. From your psychological point of view, you don't stress about anything: you have many friends and are satisfied with life.

• You don't smoke or use drugs, but you drink a certain amount of alcohol with friends on weekends.

If asked:

• As a child, you had mild problems with "eczema", but do not remember any case of contact allergy.

• You often wash your hands at work, but you've always done it at home, too. You don't wear rubber gloves.

Concern

• You are embarrassed when you feel that your hands look "unclean".

Based on these views, Norman suggested that the first two types of SPs be called "simulated patients" and the last type – "standardized patient". Although most authors use the terms "simulated" and "standardized" patient as synonyms, in our opinion, to prevent "misleading" at the beginning of the active implementation of the method in the educational process, such a division is appropriate for internal use. In this case, to distinguish between these two aspects, it is useful to consider the "simulated patient" as emphasizing the simulation of individual symptoms and signs of a real patient, and the "standardized patient" as emphasizing the consistency and strict standardization of the simulation process.

So, standardized patients are taught to give a consistent presentation that does not vary from student to student and does not differ from standardized patient to standardized patient; while a simulated patient (representing the same case) may well show variation.

Adamo considers the standardized patient as one of the components of the simulated patient, reflecting in 2003 as follows: "A standardized patient encounter is a simulated patient encounter, but a simulated patient encounter is not necessarily standardized.".

According to AMEE experts, a better description for "standardized patient" might be "standardized simulated patient". "Standardized patients" belong to the third category presented above by Collins and

Harden. Standardized patients are used mostly for health care examinations and research where a high degree of reproducibility is needed.

However, the question of the optimal name for SPs worldwide remains debatable. An international AMEE expert survey of SPs use found that Asian and European educators commonly refer to all SPs as "simulated," whereas in the US the opposite is true: simulated and standardized patients are classified together as "standardized". As discussed by Collins and Harden in their early AMEE guide to real patients, simulated patients, and simulators in clinical examinations, the term standardized patient itself can be misleading because it does not indicate whether the patient is real or simulated: people can depict their own problems or those of other patients (Clinical Skills Assessment Researchers, 1993). However, AMEE's experience shows that the term "standardized patient" is now commonly used to describe people without actual disease who are trained to present a case in a consistent manner. People with a real disease who portray their own case are usually called real patients.

When adapting the methodology to our conditions and opportunities to prevent confusion and mistakes, we combined the experience and recommendations of the world's leading experts with our own views and experience.

All participants in this type of training are *simulated participants*:

A student/cadet is a simulated doctor or nurse.

An actor (animator) is a simulated patient or a simulated partner of a patient.

The teacher is a simulated expert participant.

Student-expert – a simulated expert participant (can be introduced in individual scenarios).

We divide the simulated patients into several categories:

A simulated patient is an actor/animator who is involved in mastering certain skills of examination and physical examination by students of the 2nd and 3rd year without using additional simulation tools. Such a patient does not have strict restrictions on the standard of behavior.

The instructor patient is a separate subcategory of the simulated patient. Such an actor/animator, in addition to performing the functions of a simulated patient, also performs the duties of an instructor who corrects errors and provides instruction during the training simulation.

A simple simulated patient is an actor/animator who is involved in short clinical scenarios during the mastery of individual competencies by students of the 4th-6th year without the use of additional simulation tools. Such a patient has certain role standards in certain parts of the scenario.

A standardized simulated patient is an actor/animator who is involved in clinical scenarios and has clear role standards throughout the entire scenario without the use of additional simulation tools.

A real standardized patient is an actor/animator who is involved in simulating the disease he actually suffers from.

A hybrid complex simulated patient is an actor/animator who is involved in short clinical scenarios when students of the 4th-6th year master certain competencies with the use of additional simulation tools (dummy, simulator, "simulation pad", etc.). Such a patient has certain role standards in certain parts of the scenario.

A hybrid standardized simulated patient – an actor/animator who is involved in clinical scenarios and has clear role standards during the entire scenario with the use of additional simulation tools.

A psychotyped standardized simulated patient is an actor/animator who is involved in scenarios for mastering communication skills or soft skills with clear standardization of both non-verbal signs of psychotype and all verbal stages of the role.

Chapter 5
THE MAIN STANDARDS FOR FORMING THE BASE OF STANDARDIZED PATIENTS ACCORDING TO THE RECOMMENDATIONS OF AMEE AND ASPE

Standardized patient practice standards were first proposed by experts in the field of SP methodology of ASPE and published in AMEE guidelines No. 13 and No. 42.

This textbook gives standards, as during four years we have adapted these methods to our conditions.

1. Standardized patients are one of the most effective resources of material and methodical provision of the educational process in medicine at all levels both for the identification and evaluation of skills, which are related to communication and physical examination of the patient.

2. The SP is an integral part of the educational team focused on achieving practical learning outcomes.

3 According to H. Barrows himself, "a standardized patient is a person carefully trained to simulate a real patient so great that the simulation cannot be noticed even by an experienced clinician".

4. Besides of the SP's ability to play the roles of "real" patients, they should be trained to provide feedback during training and to provide an expert assessment of the actions during exams.

5. The formation of the SP efficient resource and saving time for the staff will require clear algorithms for creating the management of the SP "bank", as well as a clearly formed methodology for SPs training.

6. Not everyone can be the SP: for the SP program execution, the important thing is recruitment, selection, training and retention of a capable, suitable, responsible and reliable SP.

7. All methods of training and algorithms for modeling clinical situations are to be standardized and undergo a permanent reverification of realism, validity and supremacy.

8. The SP must always be carried out in highly repeating ways that supposes objectivity and standardness with each person, as it is trained (or tested) for the creation of fair conditions and equal chances.

The Standards of Basic Practice of the Association of Standardized Patient Educators (SOBP ASPE) have become even more important for the development of state standards in the organization and tasks in the educational process of the Institute of Standardized Patients for us. It is a living document, which is periodically reviewed and changed under the guidance of the ASPE Committee of Standards of Practice, the SP methodology is constantly improved and adapted to the practice of simulation modeling."

These standards are developed in five sections (directions):

1. **Safe work environment.** Safety is the main motivation for the pursuit of clinical modeling. The simulation can be carried out in a safe way, which minimizes the risk for all interested parties, regardless of the activity.

2. **Working out and continuous development of the case.** It is necessary to establish and maintain standards of advanced experience in education and research. Cooperation requires exchange of the best practices with colleagues on a local and global level.

3. **Mandatory SP training according to three key categories:** role-playing image; feedback to the learner; participation in the final assessment as standardized instruments.

4. **SP management.**

5. **Professional development.** Quality means providing and striving for continuous improvement. Professionalism means that we are part of a community of professionals and act according to common ethics, values and standards.

Each section of standards is divided into appropriate principles with accompanying key practices. However, not all practices can be applied to every situation.

We present all of ASPE's proposed SOBP principles with some of our own views and comments.

Section 1. Safe work environment

The SP managers with teachers are committed to providing a safe psychological and physical learning environment for all stakeholders:

SP, students/cadets, faculty, patient partners, and other staff involved in the simulation (*INACSL Standard: Professional Integrity*). The SP Educators Community of the European Association of Standardized Patients has formulated three principles related to the creation and maintenance of a safe working environment: safe working practices, confidentiality and respect.

1.1. Safe working methods:	1.1.1 Providing safe working conditions during planning activities (eg, number of shifts, number of breaks, physical, cognitive and psychological challenges during role portrayal). 1.1.2 Anticipation and recognition of potential occupational hazards, including SPs safety threats in the environment (eg, allergens, exposure to sharps, air quality, active defibrillators). 1.1.3 Verification of the suitability of SPs for the role they perform (in particular, the absence of conflict of interest and psychological danger). 1.1.4 Allow SPs to withdraw from any particular activity if they believe their participation is inappropriate. 1.1.5 Mandatory provision of a brief job description to SP so that they clearly understand the modeling guidelines and parameters. 1.1.6 Providing SPs with strategies to mitigate potential adverse effects of role portrayal and prevent physical injury or fatigue. 1.1.7 Informing SPs and students/cadets about the criteria and processes for terminating the simulation if any of them consider it harmful. 1.1.8 Time structuring and development of requirements and process for role cancellation and/or debriefing. 1.1.9 Mandatory development of algorithms for tracking and responding to the negative consequences of SPs participation in the simulation. 1.1.10 Development of a procedure for simulated participants to report adverse effects of the simulation (eg, documentation and actions to resolve the situation). 1.1.11 Support SPs operating in accordance with defined programmatic expectations when complained about. 1.1.12 Management of student/cadet expectations regarding opportunities and limitations when working with SPs. 1.1.13 Constant work with the SPs and students/cadets, regarding the clear definition of the expected scope of the SP's participation in the performance of work tasks
1.2. Privacy	1.2.1 An understanding of the specific privacy principles that apply to all aspects of each simulation event. 1.2.2 Confidence in the SP's understanding and adherence to confidentiality principles related to specific clinical simulation events. 1.2.3 Protecting the confidentiality of personal information of all interested parties, including that which may be disclosed during simulation.

Continuation of Section 1

1.3 Respect	1.3.1 Respect the boundaries that are defined by SPs (eg, modesty, limit physical contact, impact on the person). 1.3.2 Providing SPs with complete information in the proper form to make an informed decision regarding participation in the performance of work tasks. 1.3.3 Being sure that SPs clearly understand how and when they will be compensated for work performed (eg, may include tuition and work time, travel expenses, meal vouchers, gift cards)

Section 2. Design and development of the case

Just as educational and program goals fundamentally guide educational activities, so the design and development of simulation cases are critically important for the SP teacher. Case materials should include all description documents, any accompanying documents (eg, charts, photographs, patient education materials), assessment tools, student (cadet) learning resources (eg, links and videos), and all algorithms the SP actions he needs to take to prepare for teaching or assessment.

So, SP simulation cases should contain several components that are intended for different case users (SP teachers; students/cadets; examiners; SP partners; SP themselves; SP dressers; SP managers (administrators); SP examiners (experts).

The development of these materials should be optimized through a collaborative multi-step process using a set of best practices for simulation design (INACSL *Standard: Simulation Design*) as well as guidelines relevant to the professional context (national and local medical protocols, laws, etc.). Considering the importance of case-based materials to SP's work, experience in developing instructional and assessment materials is important for educators. There are two principles that guide SP's case development activities: preparation and case components.

2.1 Preparation	2.1.1 Suitability of cases to measurable learning goals. (INACSL Standard: Outcomes and Objectives) . 2.1.2 Identification and engagement of relevant subject matter experts to assist in the creation of materials. 2.1.3 Being sure that case studies are based on authentic issues and their materials adhere to the principle of respect for the individuals represented in the case study to prevent bias or stereotyping of marginalized populations.

Continuation of Section 2

2.1 Preparation	2.1.4 The case development process must have sufficient time to develop, review, and edit case materials before its implementation. 2.1.5 All changes that occurred as a result of trial runs or other pilot processes should be considered before the implementation of the case
2.2 Components of the case	2.2.1 Clear, measurable goals and objectives. 2.2.2 Goals and tasks that determine the planned level of students. 2.2.3 A simulation design that is fit for purpose. 2.2.4 Replicable design. 2.2.5 Information for SP (eg, situation and background, history, exposure and behaviour, signs and symptoms for modeling, prompts). 2.2.6 Learning resources (eg, props, dummy, video, instructor). 2.2.7 Case-specific feedback or summary recommendations. 2.2.8 Briefing of SP, teacher, students. 2.2.9 Time frames. 2.2.10 Evaluation tools and performance indicators (eg, checklists and rating scales, participant and facilitator evaluations). 2.2.11 Training protocols for evaluators (SP or others). 2.2.12 Data for records management and SP recruitment (eg, author information, date of development, patient race and ethnicity, body type criteria)

Section 3. Training SP

The actor (SP) training should prepare them to perform roles, provide feedback and develop assessment tools. These three areas are separate skills, but not mutually exclusive. It is the responsibility of the SP teacher to integrate the development of these skills into the teaching of standardized patients according to the learning objectives of the activity and the experience of the actors themselves. Training can be conducted in any format (face-to-face, online, or mixed).

Preparation for SP training

The context in which SP must operate determines the degree of standardization (consistency and precision) of their behavior both within a single SP simulation and between SP performing the same role. SP educators must apply the same learning principles when training all simulated participants, including SP, for all types of simulation (hybrid, mixed modality, etc.).

Role image

The SP teachers are expected to provide consistency and accuracy in SPs performance. Because SPs are often asked to participate in roles that require at least some physical and emotional vulnerability, the SP educators must provide a supportive and safe educational and learning environment for SP (see Section 1. Safe Work Environment).

Feedback

Feedback is important to learning. While students may receive feedback from many educational sources, including clinicians and peers, SP feedback provides a unique perspective. As Berenson et al. (2012) note, "SP's can provide students with unique and valuable information about how their actions and behavior have affected the student's emotional experience, the SP's trust in the student, and the SP's understanding of the information being shared. So, SP feedback plays a critically important educational role in interpersonal and emotional spheres". With proper training, SP can also provide feedback on a student's communication, clinical, or procedural skills. Effective feedback requires knowledge of the models or protocols adopted by each institution, and SP educators can teach SP oral and written feedback strategies.

Assessment tools

Educational and psychological testing standards define assessment as "any systematic method of obtaining information from tests and other sources that is used to draw conclusions about the characteristics of people, objects, or programs".

In many assessment contexts, students must demonstrate their competence through behavior which is assessed by observers. SPs often play a role and observe behavior at the same time. After the meeting, SPs can document the student's performance on assessment tools. If appropriate, SP training should also focus on accurate and consistent performance of assessment instruments. The SP assessment can be formative or summative, can take different formats (eg, single meeting, multiple meeting, OSCE) and use many types of assessment tools (eg, checklists, rubrics, narrative). SP performance expectations vary depending on the type or format of the assessment. There are five principles that SP teachers should follow related to the SP teaching methodology: preparing for the learning process, role-playing learning, providing feedback, completing assessment tools, and reflecting on the learning process.

3.1 Preparation for training	3.1.1 Review the purpose, objectives and outcomes (see INACSL Standard: Outcomes and Objectives), logistics and case materials for the activity. 3.1.2 Eliminating own gaps in knowledge, if any. 3.1.3 Creating a learning plan that fits the context and format of each activity (eg, a group learning of standardization, watching a created training video, practice with simulation equipment). 3.1.4 Collecting educational resources to supplement training. 3.1.5 Collecting administrative documents and special instructions.
3.2 Role-playing training	3.2.1 Review with the SP the key objectives, responsibilities, context (eg, student level of preparation, place in the curriculum) and format (eg, length of meeting, type of meeting) of each activity. 3.2.2 Involving SP in discussing and practicing the characteristics of role portrayal (eg, affect, signs and symptoms, behaviour). 3.2.3 Providing SP with strategy for dealing with unexpected questions and student/cadet behavior. 3.2.4 Providing consistency and accuracy of role descriptions for individual SP, as well as for a group of SP depicting the same role. 3.2.5 Providing SP readiness for simulation through repeated practice rehearsals and targeted feedback
3.3 Teaching feedback	3.3.1 Acquaintance of the SP with the basic principles of feedback that apply to the planned activity. 3.3.2 Informing SP of the objectives of the feedback and the level of students they will be learning with. 3.3.3 Informing SP of feedback logistics and settings (eg, one-on-one student feedback, small group feedback, summative modeling). 3.3.4 Teaching SP to use their observations, responses, and knowledge to provide feedback on observed and modified student behavior. 3.3.5 Providing SP readiness through repeated practice and targeted feedback
3.4 Learning how to fill out assessment tools	3.4.1 Ensure that SPs understand the nature, context and objectives of the assessment. 3.4.2 Ensure that SPs understand the format of the assessment tool. 3.4.3 Ensure that SPs are able to complete assessment instruments within the allotted time. 3.4.4 Provide SPs practice in completing assessment instruments with a variety of student behavior. 3.4.5 Ensure that SPs understand both the principle and the perceptual experience of any physical examination maneuvers they will be evaluating. 3.4.6 Ensure consistent and accurate completion during formative assessment of the assessment tool by individual SPs and the SP groups performing the same task.

Continuation of Section 3

3.4 Learning how to fill out assessment tools	3.4.7 Testing the reliability at which a student will receive the same score if assessed by different SP in high-stakes assessments. 3.4.8 Testing the reliability of the internal evaluations in high-stakes evaluations, in which SPs will assign the same score to identical performance at different points in time.
3.5 Reflection of the training process	3.5.1 Reflecting on your own teaching practice for future improvement (eg, assessment form, summaries, watching videos). (See also item 4.6: Quality management.)

Section 4. Program management

SP programs provide a trained SP cohort, experience in SP methodology, and processes that efficiently and cost-effectively administer SP services. Management in SP programs exists along a spectrum. Some programs may have one person designated to administer the SP program and some SP, while others may be headed by a dedicated manager who oversees the work of many SP, tutors, and administrators. Regardless of size, SP programs are responsible for quality management practice, including quality planning, quality assurance, quality control, and quality improvement (see INACSL Standard: Professional Integrity). Well defined policy and procedures enable the SP program to demonstrate that it meets legislative, institutional and practice standards. They also define approaches to achieving program goals, provide accountability to stakeholders (SP, students, tutors, staff) and encourage continuous improvement. There are six principles to consider when managing SP programs.

4.1 Purpose	4.1.1 Formulating the program mission. 4.1.2 Developing the targets of program. 4.1.3 Defining measurable objectives for each objective (if needed).
4.2 Expertise	4.2.1 Having in-depth knowledge of SP methodology. 4.2.2 Promoting the integration of SP methodology into the curriculum where it necessary. 4.2.3 Determining the best moment when SP should be included in the simulation activity.

Continuation of Section 4

4.2 Expertise	4.2.4 Cooperation with subject matter experts to develop SP cases, training and assessment materials. 4.2.5 SP training according to scenario or project parameters.
4.3 Policies and Procedures	4.3.1 Development and documenting policy to guide SP programs. 4.3.2 Development and documenting policy that considers access and integration of people with disabilities. 4.3.3 Development and documenting business processes and procedures, including but not limited to the creation of financial management, business and strategic plans. 4.3.4 Ensure the relevance and availability of policy and procedures. 4.3.5 Dissemination of policy and procedures to relevant stakeholders.
4.4 Record keeping	4.4.1 Collaboration with subject matter experts to develop a system of reporting on the performance of students to interested parties (for example, students, curriculum developers, teachers, administration). 4.4.2 Ensuring that the policy is available for case sharing and archiving. 4.4.3 Development and documenting safe storage methods, archiving and destruction of confidential data (for example, SP records, student data, video data, consent forms, release forms)
4.5 Team management	4.5.1 Legal, financial and HR experts consulting in order to ensure that the SP status (for example, employee, independent contractor, volunteer) and remuneration structure (if applicable) meet institutional requirements and legislation. 4.5.2 Development of processes of identification, verification, interview, selection, surveying and supporting SPs and staff. 4.5.3 Recruitment and maintaining the SP cohort that reflects diversity of the people they represent in modeling activities. 4.5.4 Establishment of policy and procedure regarding psychological, physical and environmental safety of SP, students, staff and teachers. (See section 1: Safe Working Methods".) 4.5.5 Promoting an ability of continuing professional development for all staff, including SPs
4.6 Quality management	4.6.1 Regularly collecting data to assess the consistency of program activity with legislative, institutional and program policy and procedures. 4.6.2 Collecting regular feedback from SPs, students, teachers and others users regarding the quality of services provided by the program. 4.6.3 Analysis of data and other feedback in a timely manner. 4.6.4 Implementing changes for continuous improvement. 4.6.5 Informing stakeholders about changes made on their feedback basis

Section 5. Professional development

The SP educators engage in professional development to promote excellence in their own practice, community of practice, and stakeholders. Professionalism is defined for many professions which the SP teachers interact with, including medicine and nursing. There are intersections with some of these concepts of professionalism. However, we are a new heterogeneous practice with no licensing process. These SOBP are our coherent attempt to form standards of professionalism for our practice. We draw on Steinert's model of teacher development to form professionalism and professional development in relation to our context. In particular, we focus on three principles: career development, scholarship, and leadership.

5.1 Career development	5.1.1 Development and promoting knowledge, skills and attitudes related to SP-based modeling. 5.1.2 Development and disseminate experience in educational and assessment theories, principles, and processes relevant to your practice context (eg, medical education, nursing education, legal and law training). 5.1.3 Maintaining membership in professional modeling societies (eg, ASPE, ASPiH, INACSL, SESAM, SSH). 5.1.4 Taking advantage of educational opportunities (eg, professional conferences, courses, degree programs, certificates). 5.1.5 Development of personal management skills (eg, time management, health strategy, career planning). 5.1.6 Looking for career mentoring opportunities
5.2 Rewards	5.2.1 Development of understanding of the range of opportunities for rewards in SP methodology. 5.2.2 Identification and/or development of new contexts for SP methodology. 5.2.3 Contribution to the development of best practice through innovation, research and dissemination of new methods in various directions (eg, publications, presentations)
5.3 Leadership	5.3.1 Promoting understanding and development of SP methodology at local, national and international levels. 5.3.2 Mentoring and supporting SP and other SP educators in their institution and community of practice. 5.3.3 Looking for and supporting the development of leadership skills (eg, collaboration, team building, change management, effective interpersonal communication, conflict resolution)

Chapter 6
RECRUITMENT OF SIMULATED PARTICIPANTS FOR EFFECTIVE IMPLEMENTATION AND DEVELOPMENT OF THE PROGRAM

Simulated patient

Simulated patients can be both professional actors and non-professionals (animators) or volunteer patients. At the same time, global practice shows that each medical school forms requirements for SP job applicants independently: a number of schools use only professional actors, others – a combination of volunteers and professional actors, even the experience of using volunteer patients by a medical school is described. The most important factor for the formation of requirements for applicants is the institution's financial capabilities to pay salaries and additional simulation tools.

Those facilities that use paid patients set different wage levels depending on the qualifications of SP. Professional actors who are involved in psychiatric case studies (Eagles et al., 2007), in the assessment of complex communication skills (psychotyped standardized simulated patients – according to our classification) and those who are involved in cases where feedback with the student is required are the most paid.

Although there have been no studies comparing the effectiveness of the use of professional and non-professional actors, AMEE experts concluded that "historical and financial reasons, as well as local preferences, determine which type of SP will be used. Financial resources are probably the biggest influence on whether professional actors will be used as SP."

In the process of implementation and adaptation of the methodology in our institution, we used both professional actors and volunteer animators, and concluded that in most cases there is no fundamental difference between these two groups of simulated patients in all cases, except for psychotyped standardized simulated patients, when the use of professional actors has significant advantages.

So, when forming a base of simulated patients, the budget that the institution is ready to spend on them, the natural abilities of the applicants themselves, and the category of simulated patients to which the recruitment refers are of the most importance.

Patient-Instructor

Taking into account the practical lack of our own experience in involvement of a patient-instructor (PI), to understand the specifics of this type of SP, we use the detailed analysis given in the proper AMEE guidance.

The SP instructor, or PI, was first introduced and described in 1976 by Stillman et al. The "role" of such a patient involves both fulfilling a certain role of SP and teaching the student how to manage the consultation or situation more effectively, followed by the scenario reacting. Such a sequence in the work of PI was first described by Benbasset & Baumal (2002).

This role is very difficult, the circle of applicants is very narrow, so there are always few such patients. If necessary, the PI scenario can be replaced by a regular questionnaire for feedback. Although the correction of the student's actions during the simulation itself, if it is possible to ensure it, seems to be more effective.

In the world literature (Kretzschmar, 1978; Beckmann & Meyers, 1988; Coleman et al., 2002) other types of highly specialized patient-instructors are described: gynecological teacher (GTA), gynecological educational professional patient (GEPP) and a patient with the genital tract. But we did not introduce such types of practice, but for these purposes we use a hybrid standardized patient with the simultaneous participation of a teacher.

When selecting candidates for the role of PI, the AMEE experts recommend using such key factors as abilities, suitability, trust, integrity and credibility.

1. Ability. In addition to the desire to perform the role of a patient, and the presence of certain positive qualities, the lack of ability to realistically and consistently present the role is a key point for the applicant's rejection. The role of SP, and especially PI, requires not only high (above average) intelligence, but also emotional maturity. If the main qualities of a professional SP are the ability to remember their roles, to maintain focusing and concentration on the performance of their roles throughout the

simulation period, and to responsibly realize the importance of following the scenario, the ability to work as a team member and as a teacher are among the leading requirements for the PI. In addition to having complete knowledge of the medical and emotional facts to portray the patient, having to tell the same specific story many times, responding in a certain way, and performing actions standardized with other SP, the patient instructor must remember a huge number of facts and instructions. Even if the SP is involved in providing feedback to the student, he should also be able to observe and remember the student's verbal and nonverbal behavior. So, SP must have the ability to manage the dual task of performing the role on the one hand, and at the same time remember students' work in order to provide appropriate feedback later – on the other hand. In addition, many roles are emotionally challenging and demanding. So, when recruiting personnel for SP, it is very important to determine the psychotypes, the tendency to emotional lability and the level of stress resistance of the applicants. And most of all, this concerns applicants for the role of a psychotyped standardized simulated patient – these roles are the most difficult, so many authors recommend giving preference to professional actors in such cases.

2. Attitude. It would be a big mistake to recruit someone as the SP who has a negative attitude towards the profession of doctor or nurse they will be helping to train. When selecting, it is also important to determine why the person wants to be a PI. An important priority in this case should be to protect the safety of students, strive to improve their educational experience and develop their confidence.

3. Criminal record. In many countries, it is also prohibited to employ persons with a previous criminal record during work with junior students.

4. Good faith. Good faith is a necessary trait for the SP: a person who has spent a lot of time studying and who can unexpectedly fail to show up for a study or exam without notice can significantly hinder the educational process. However, regardless of how conscientious SP may be, AMEE experts recommend organizing "back-up" SP, particularly for evaluation. To reinforce integrity, it is important that the responsibilities of SP are clearly defined at the time of recruitment.

5. Credibility. Age. Simulated patients can be of any age, but it is important that the SP looks as much as possible like the real patient being

simulated (for example, if the role calls for an 18-year-old patient, a young 23-year-old SP will be believable). Many authors (Brown et al., 2005; Lane et al., 1999; Woodward, 1995) have described positive experiences of using children as SP who were trained to present a clinical case and were good role players. One method of using children as SP is to have a pair of parents and children play alone, but the parents report simulated symptoms in the child. In addition, very positive experiences have been described using specially trained adolescents as SP and simulating clinical situations for students and clinicians to acquire communication skills to communicate on topics such as risky activity and privacy (Blake & Greaven, 1999; Blake et al., 2000; Blake et al., 2006). However, while it is extremely important to strive for authenticity, the world experience shows that it is much easier to attract older SP and SP who are students than people in their 20s to 40s years old. Therefore, when preparing the scenarios, the difficulties with the set of SP, which span the age range, should be considered.

6. Authenticity. Ethnicity. As with age, it is important to establish trust in ethnicity. If the role depends on the patient belonging to a particular ethnic group, it is important to involve SP from that group.

Chapter 7
ORGANIZATION AND MANAGEMENT OF THE "SIMULATED PATIENT" PROGRAM

The main responsibilities of the SP manager are the creation of the SP database, its constant updating depending on the requirements of the educational program and work programs of the departments, and most importantly, the retention and constant motivation of trained SP. For this position, it is better to choose not a professional doctor or teacher, but a management or HR specialist.

The first thing that the SP manager faces is the creation of the SP base. As for finding candidates for the role SP, our own experience shows that word of mouth is the best method. Almost such an experience was also described by AMEE experts. In addition, they believe that once the SP bank is established, volunteers can be recruited by word of mouth, through already employed SP. We also had SP recruitment experience during the patient school at the university of the third age. Help in the search for SP can be provided by doctors of the university clinic and clinical departments due to the involvement of their patients. If there is a need for a large number of SP and a sufficient budget, you may have to turn to advertising. However, regardless of which recruitment method is used, a thorough screening of applicants for participation in the SP program should be mandatory.

Before searching, it is necessary to make a final decision about the terms of payment: whether there will be mercenaries who will receive a salary, or whether there will be volunteers. From our experience, employed patients are much more responsible towards work and their duties.

It is better to conduct an interview with the SP during the recruiting process together with the SP manager and the teachers.

Preliminary screening of potential SP is mandatory, it is desirable that the meeting be held individually, face-to-face, with the determination of the motives of the potential SP in the first place, which will provide the first information about the presence of leading qualities for the SP. To study the suitability of the applicant and the convenience of the

manager, a questionnaire or a kind of checklist (the interview protocol) can be very useful.

When selecting patients for our database, we used 4 steps to attract an applicant, which were proposed by AMEE:

Step 1: Screening interview, including questions such as "Why are You interested in becoming the SP?", "Do You or a member of your family have any negative experiences with the disease?"

Step 2: Providing the candidate with information about what the SP's responsibilities include, including the opportunity to observe both the SP's own training and role-play.

Step 3: Reaching a mutual agreement on the educational goals of your program.

Step 4: Agreement of a trial period to assess the candidate's ability and suitability, and in turn giving the candidate an opportunity to assess whether they enjoy being the SP. The probationary period in the case of SP is very useful and helps to reject the services of individual applicants if problems arise during the initial training.

After hiring, training and approval of the SP comes the most important stage of the work of the entire institute of standardized patients – their daily work. This requires a very careful attitude to SP, their maximum effective use and development of means of their motivation and retention.

Important factors for maintaining SP motivation and professionalism are:

1. Constant involvement of SP in the educational process without big interruptions in work.

2. Constant support of feedback with the SP, ensuring that their wishes are considered when forming the work schedule for the year, month, week.

3. One of the more influential motivational factors for SP is the fee (if it is stipulated in the contract) and additional bonus. But this is a very controversial issue, because according to some AMEE experts, low pay can psychologically be perceived as a low level of evaluation of the SP's work, which will lead to a significant decrease in motivation. Therefore, with insufficient funds, it is better to develop a motivational program for attracting volunteers, which would be based on the desire to contribute to the education of doctors, getting pleasure from it and developing a sense of self-worth.

AMEE experts described a very positive experience of engaging volunteers as SP. People who voluntarily participate in the medical care program note satisfaction with the social significance of SP and the altruistic aspect of their help in training future doctors as the main motivational criteria. They happily discuss their different roles, share experience in different disciplines and Objective Structured Clinical Examination (OSCE) stations, and chat with teachers and examiners during breaks. This social interaction should be encouraged as a way of maintaining interest and commitment.

So, recognition of SP efforts has critical importance in maintaining and replenishing the SP base. Such recognition can be annual awards; annual festive receptions attended by key employees of the Faculty of Medicine; recognition certificates; any other way of saying thanks (Christmas cards, "thank you" notes). It is good practice for teacher and student feedback on the added value of SP for teaching and learning to be shared with SP publicly.

Undoubtedly, the most important thing for the effective work of SP is the professional organization of their work, which stems from the main purpose of using SP: the development of communication skills, soft skills and replacing or enriching the practical experience of education seekers.

Training is always carried out according to a pre-arranged schedule, which must consider the wishes of all SP. Training using SP should be conducted on the basis of specially equipped premises. Depending on the skill level, the equipment conditions can vary significantly. A classroom equipped with a doctor's table, a couch and a few chairs are enough for junior students to learn the simplest skills. In such case, it is best to use PI (patient instructors). To work out complex scenarios, training rooms can be equipped as hospital wards, intensive care wards, or in any other way as the scenario requires. However, the condition must always be observed – the student's work with SP must always be one-on-one (unless otherwise provided by the scenario). Only if these conditions are met, it is possible for the student to master the skills and ensure a careful attitude towards SP. If it is necessary to evaluate a student, it is necessary to organize a process of observing his actions, in which other students can be involved as experts. In this case, the room in which the student works must have a window to the next room or an observing camera.

Based on our own experience, we concluded that the best form of organizing the educational process involving standardized patients is the creation of a separate simulated clinic, in which simulations of all types of premises, which are provided by all involved scenarios, are created.

Such a center can be established as a Training and Production Complex (TPC), which will be managed by a leading specialist in all types of simulation training at the institution.

The TPC may include several departments: the division of simulated patients (the head of which is the SP manager), the department of providing simulation support for the educational process, the simulation center, the department of preparation and conducting of OSCE, the educational and methodological department.

As for positions for SP, they are created by specialists of the unit (institute) of simulated patients. Fulfilling the SP role is included in their job descriptions. If SP are volunteers, they do not need formal employment, but sign civil agreements to refuse to receive any honorarium, to properly perform SP duties, and not to disclose information related to the SP's work outside the educational institution.

For the convenient organization of the work of the SP manager, there are a large number of ready-made programs for creating one's own electronic database of simulated patients. Such programs allow users to quickly create the SP schedule, make changes to it, search for SP replacements, and identify "white spots" for finding new SP based on the necessary criteria (age, gender, ethnicity, etc.).

If the institution does not have the opportunity to create an TPC, or a similar structure, the educational process with the participation of SP can be conducted in the educational premises of the departments. In conditions of strict quarantine, and then in conditions of martial law, we organized remote work of the SP. Even in individual scenarios, SP were remotely involved in the conduct of OSCE during the final certification using the Microsoft Teams platform and their own program, which was developed for conducting remote OSCE.

According to our own experience, the following positions should be created in the unit responsible for SP:

1. The head of the unit (SP manager). It is better to appoint a management or HR specialist for this position.

2. A methodist (responsible for creating a database of clinical cases and scenarios, methodical support of the educational process using SP). For this position, it is best to appoint an experienced teacher from the clinical department (can work part-time).

3. A leading specialist in the SP training, SP teachers and examiners. This position should also be held by an experienced teacher. It is better not to combine the positions of a methodologist and a leading SP specialist due to the large amount of work that needs to be performed at the same time.

4. An engineer who will be responsible for the operation and improvement of all electronic systems (SP electronic database, electronic evaluation system, video surveillance system, audio system, proper condition of simulators and dummies for hybrid simulation).

5. SP specialists (if the management of the institution has made a relevant decision and funds have been allocated for the payment of SP). A qualified and qualified person with any secondary education can be accepted for this position as a simulated patient. In the case when a decision has been made about the need to introduce the position of the SP makeup artist for more realistic reproduction of scenarios, he is also appointed as a specialist.

Chapter 8
TYPES OF SIMULATION WITH INVOLVING SIMULATED PATIENTS

As mentioned earlier, simulated patients can be used for both training and evaluation. However, SP preparation for these types of simulations is quite different, although the same scenarios may be used.

Therefore, we introduce the concepts of a clinical case, a clinical scenario for the SP, and the role of the SP.

A clinical case is a very detailed description of a real case of the disease, which contains all the anamnesis data, the results of a general and physical examination, the results of all examinations, a description of all consultations, treatment regimens and their results.

A clinical scenario is a package of documents developed on the basis of the clinical case. Such a package should contain:

- General description of the clinical case
- Detailed life and disease history for SP (or instructions for using your own history)
- The description of all the actions of the SP during the simulation with a very detailed description of the image of all the symptoms that the SP will need to reproduce
- A detailed description of the student/cadet actions algorithm during the simulation
- SP instructions about criteria for evaluating student/cadet actions
- Student/cadet simulated patient assessment checklist
- The simulated patient's teacher assessment checklist
- Student/cadet teacher assessment checklist

The role of SP is to provide behavioral instructions, history data, and the description of all symptoms to be reproduced by the SP. The SP's role may cover part of the consultation (eg, history taking) or recreate all steps of the full consultation, including physical examination and discussion of the treatment plan.

It should be considered that several roles can be developed for one clinical scenario, depending on the type of patient's behavior or the patient's

psychotype (aggressive, dissatisfied, silent, etc.). Besides, the SP can be trained to be quite passive (checked by the student with little interaction from the SP); provide relatively direct, clearly defined information; to play the role of a chatterbox, when the student will have to work quite a lot to get the necessary information. For senior students and cadets, patients can be trained to ask complicated questions, demonstrate complex emotional reactions (crying, anger, etc.), or portray patients in a state of alcohol intoxication.

Teaching

Simulation of the clinical situation can be divided into three main groups:

1. Communication and counselling skills.

Simple:

- Starting a conversation, making contact with the patient.
- Collection of information about the patient. History taking.
- Providing information to the patient about the examination plan, examination results, explanation of the diagnosis, treatment planning, discussion of treatment results.
- End of consultation
- Communication with other medical professionals

Complex:

- The ability to correctly choose the communication algorithm (in particular, when making the first contact with the patient) depending on the psychotype of the patient.
- Collection of sexual anamneses.
- HIV patient counselling.
- Telling the patient bad news (a malignant tumor or HIV diagnosed for the first time, lack of effect from treatment, etc.).
- Communication skills in emergency situations.
- Discussion of a medical error.
- Counselling when applying for domestic or sexual violence.

In all cases of modeling, both simple and complex communication skills, the main goal is to reproduce as realistically and clearly as possible the range and topics involved in real consultations. Therefore, in order for

students/cadets to effectively master communication skills, it is necessary to develop a large number of different scenarios and roles.

2. Physical examination and skills in performing individual manipulations.

As for the examination the patient by students in propaedeutic disciplines, when the main goal of training is to master the technique of conducting the examination or a simple manipulation (for example, measuring blood pressure), it is clear that the SP must know this technique perfectly, but such an examination does not require any simulation options – in this case, you can use both a healthy SP and SP with any pathology, but without any standardization. Such a simulation is "*simple".*

If the goal is to teach and assess the student's ability to identify important symptoms or syndromes, having an actual, standardized patient with these features is the best. In cases where it is not possible to involve a real patient, a realistic simulation is necessary. Such a simulation is called "*complex".*

Barrows stated in 1999 that "the only limit to the cases simulated by SP is their consciousness". The illustrative example of using SP to model most (over 50) pain and neurological symptoms, today there is the real "medical simulation industry".

In addition to the fact that the SP can be taught to simulate even a pneumothorax (every time the student puts the stethoscope to the point of auscultation of the lungs, the SP stops breathing and stays with the shoulder down on the affected side), today a great number of simulation and imitation aids have been developed: special make-up; silicone pads that simulate burns, wounds, swelling; pads that deform the figure of the SP or simulate the belly of a pregnant woman (even with the ability to palpate parts of the fetus and listen to the heartbeat of the fetus), and others. Such a simulation is one of the types of *"hybrid simulation".*

One of the most advanced modeling aids with SP, which is under active development, is augmented reality, where individual symptoms are simulated thanks to augmented reality glasses.

These are all types of complex simulation, which, unlike a simple one, requires a high qualification of the SP trainer, perfect clinical scenarios, significant training efforts and additional financial costs. However, most medical schools that have implemented complex and hybrid simulation.

It is clear that training SP to mimic physical signs and symptoms is indeed a difficult task. Therefore, many medical schools decide to use real standardized patients for this if they can be arranged, or use real standardized patients for some examination skills and SP for others.

Although a complex simulation is used by many medical schools, the most common is hybrid (or combined) simulation. In this case, the SP is used for communication, and the manipulation itself (either simple – venous puncture, or more complex – gynecological examination or even virtual gastroscopy) is performed on the simulator. In this case, the most realistic conditions are created, and the possibilities are limited practically only by the volume of financing.

The hybrid simulation is one of the most effective for mastering medical competence, since, besides realism, it allows the use of the main types of perception – visualization, touch and sound, which gives students an opportunity to integrate all the necessary professional and communication skills with real patients. It is the combination of multiple skills in one simulation that is valuable for the student but challenging for the teacher.

The most complex stage of the hybrid simulation is the training SP, which must include knowledge of key aspects of the procedure to ensure an appropriate response (for example, if the local anesthetic applied by the student during the manipulation has expired, the SP must complain of pain).

Such a combination of practical and communicative skills is difficult for all simulated participants, but the effectiveness of such training is also much higher. Such a technique contributes to the mastery of the profession and the development of clinical thinking much better than studying all the skills involved in the simulation separately.

3. Comprehensive patient consultation.

This type of modeling includes elements of both previous groups, allows to reproduce a realistic picture of the interaction between a doctor and a patient, and is the basis for mastering not individual skills, but professional competencies.

4. Simulation of the clinical situation during the filming of educational films and videos.

Teaching. Duration and Frequency of the SP Use

The usual practice of the educational process using the SP is one simulation – a single contact of a student/cadet with a standardized patient for a specific role. This allows to master (or test) a separate skill, but does not provide an opportunity to form a full competence, which requires in real life a long-term contact of a doctor with a patient who has a chronic disease. There are several approaches to solving this problem.

One of them was proposed in the 90s by several medical schools in the USA and Great Britain – it is several repetitions of simulations with the same scenario, but with successively complicated tasks on several consecutive courses. So, a student with successive obtaining new knowledge in each new semester meets with the same patient, receiving more and more complicated tasks.

An alternative practice was proposed in the early 2000s, when a student was given an opportunity to communicate with the same SP, who performed the same role, for several days with various tasks, simulating the entire process of managing a patient from the first visit to the discussion of treatment results and creating further recommendations for life and plans for future visits.

In our opinion, both methods allow to master a variety of skills and acquire certain competencies and can be used both separately, depending on the purpose and goals of training at a definite department, and (if there are opportunities in the educational institution) can be combined and used to acquire interdisciplinary competencies and general medical competence throughout the entire training.

There are many positives to having multiple SP with the same role for a long time. According to SP surveys conducted by various AMEE and ASPE experts who are actively using and improving simulated patient techniques (Slavin et al., 1995; Wilkes et al., 1998; Brown et al., 2003; Linssen et al., 2007; Linssen et al., 2008), it was shown that SPs find repeated consultations pleasant, realistic and quite effective. In addition to the greater realism of the simulations, PIs noted a significant progress in the success of students and the growth of their own motivation for further work. Changes in the quality of feedback were also noted, which became more detailed against the background of the possibility of comparing consultations.

The negative aspects of this approach include, first of all, the complexity of the organization of the educational process, which requires very detailed planning from the point of view of training, database management, and the logistics of SPs selecting for students. The second downside is the significant increase in SP costs.

Assessment

The participation of SP in assessment in most medical schools of the world is mainly limited to participation in the Objective Structured Clinical Examination (OSCE). Our institution is not an exception: for conducting OSCE, we have developed 12 stations, 4 of which are equipped for SPs. These stations simulate a family doctor's office, an obstetrician-gynecologist's office, and an emergency department's office. At these stations, mainly clinical competences and specific skills are tested: most tasks are reduced to the expectation that students will perform a medical examination or procedure, or take a medical history, or make a correct diagnosis and develop a treatment plan.

The 4th OSCE station is designed as a multi-functional office that can be transformed into the office of a therapist, psychiatrist or any other specialist and is designed to test, in addition to communication skills, such soft skills as behavioral competence, the ability to correctly and quickly determine the patient's psychotype, the ability to timely detect a simulant, the ability to report bad news, etc.

We offer OSCE several times during the study period: OSCE-1 after the 3rd year, OSCE-2 as a component of the final certification of students, OSCE-3 as a component of the final certification of interns, and OSCEp as a certification of doctors to obtain or confirm a category.

The above-described types of stations for OSCE can be used when conducting OSCE-2, OSCE-3 and OSCEp. To conduct OSCE-1, the stations presented above with the use of simulated patients can be used as follows:

- Station 1 – therapeutic – testing internal medicine propaedeutic skills (physical examination skills such as percussion, auscultation, palpation and general examination).
- Station 2 – surgical – (physical examination skills of a surgical patient) with identification of individual symptoms of an "acute abdomen".

• Station 3 – pediatric – test of skills in propaedeutic of pediatrics: physical examination skills in the presence of adolescents as SPs, or communication skills with the parents of a sick child.

• Station 4 is communicative.

This step-by-step and regularity of control provides a systematic, standardized and measurable way to assess the clinical and communication skills and competencies of a doctor, starting from the student bench and throughout the professional life.

For evaluation, especially during OSCE, the most important element of simulation is standardization. Therefore, SPs need to be taught not only to present the same case or symptoms in the same way, but also to have the same emotional reactions and attitudes to their illness, to provide well-scripted, consistent verbal and non-verbal responses during the consultation and in response to the students' questions and actions. At the same time, all standardized patients who perform the same role must be taught to perform it in the same way, with only a small measurement error.

According to the form of organization of the educational process, the SP was always used in face-to-face format. However, the lockdown due to COVID-19 in 2020 and anti-epidemic measures in 2020–2021, martial law during the Russian aggression in 2022, contributed to the development and implementation of SPs engagement in a remote format. Unfortunately, this type of SPs use allows to practice and evaluate only communication competencies and some soft-skills competencies. However, in the future, the experience gained will allow you to actively implement this type of simulation for remote mastering of individual skills by students within the framework of independent work. This type of simulation will also be indispensable for acquiring special skills of remote doctor-patient communication for work in meta clinics of the future, prototypes of which have already begun to be implemented in the USA.

The use of SPs in exams also allows solving the problem of using real patients who, although they may have the same condition and similar signs of the disease, but this condition can change rapidly against the background of treatment (both worsen and improve); and some medications may prevent them from participating in the exam. These factors always make the use of real patients highly unreliable and variable. Therefore, even

when deciding to use real patients in the exam, it makes sense to prepare several simulated standardized patients "just in case." According to ASPE experts, for most assessment processes, depending on the purpose of the examination and the availability of relevant real patients, a combination of real patients and SPs is probably best.

Incognito or unannounced standardized patients

In all the cases described above, the participation of SPs in the assessment was "open", but the relevant AMEE guidance describes a very interesting practice of the use of the SP, which was proposed by Owen & Winkler (1974).

They described the use of SP to measure physician or intern performance in an incognito practice. Practitioners who are seen by these incognito standardized patients (ISP) are unaware that the patient they are consulting is not a real patient. At the same time, the research was conducted both in primary medical care institutions and in secondary medical care institutions. An example was given of simulating a rheumatic disease, which was accompanied by false X-rays and false laboratory results. Interestingly, ISP were retrospectively identified in only 1% of visits.

Training ISP for this use is very similar to using SPs for evaluation. An important component is the preparation of detailed checklists for patients.

Feedback and assessment of students' success

Feedback

Today there is a great number of variants for receiving feedback from the SP. As already mentioned, the most effective is the use of patient-instructors. But, considering certain difficulties in the implementation of this technique, other methods of feedback are also widely spread. Today, several variants for receiving feedback are actively implemented, they can be used separately or combined:

1. Filling in the checklist by the simulated patient after each simulation.
2. Filling in an expert opinion by a simulated patient.
3. Analysis of the simulation by the teacher and the patient during the debriefing based on the video materials obtained during the simulation.
4. Using the patient instructor.

Feedback to the student is of fundamental importance during the acquisition of skills and competencies, therefore teaching the SP to

adequately evaluate student actions and provide feedback are mandatory and important components of training simulated patients.

The majority of the SP managers and teachers confirm the very responsible attitude of SPs themselves to the assessment and feedback processes.

Evaluation criteria

As it was said earlier, today in the global practice of SPs involvement in the process of student evaluation, there are several directions that are independent of each other, but can be used simultaneously:

1. Assessment of the student's ability to perform a separate skill;
2. Assessment of the student's ability to communicate with the patient;
3. Evaluation of the behavioral component of communication and other soft-skills of the student;
4. Evaluation of the student's actions according to a standardized checklist;
5. Assessment of the student's level of competence;
6. Assessment of learning.

Each of these types of assessment requires separate SP training. It is not necessary to train all SPs in all types of assessment. Each SP may be involved in its own learning phase, which may require one or more types of assessment.

Evaluation according to a standardized checklist is most often used during exams and certifications, that is, for final evaluation. In such cases, the most often used is the "completed/not completed" scale for each individual item, and the quantitative assessment is the sum of the points of the items that have been completed.

Assessment of individual skills, communication abilities and soft-skills is usually carried out at the practical session, that is, such an assessment is formative. The formative assessment can be combined with feedback, which makes it possible to significantly improve the student's academic performance and actively involve him in the process of forming his own professional competence. The formative assessment may not always be represented by a numerical indicator – it may, for example, be a description of the SP's overall impression of the student's consultation. When it

comes to communication skills, the SP can describe whether the student was sympathetic, attentive, whether the SP gave the impression of "easy communication", and so on. If quantification is required, the SP can assign points to each of the described impressions: for example, empathy can be rated from 0 to 3 points, and ease of communication from 0 to 5 points.

The final quantitative assessment is always carried out by the teacher (or examiner), but considering the SP assessment should always be mandatory. A teacher's or examiner's assessment may differ significantly from the SP's assessment (or rating) because their assessment objectives are quite different.

AMEE experts believe that one of the important factors during the evaluation is the evaluation of the student's work performance.

Evaluation of simulation participants is also carried out by the teacher, who provides feedback not only to the student during the debriefing (individual or general), but also to the SP himself. Evaluation by the teacher can be carried out both in the mode of direct presence at the simulation as an observer, and during remote observation of the simulation in online or offline format.

So, the student receives two evaluations at once – from the SP and from the teacher, which allows to see his degree of mastery of professional competence much more deeply.

One important component of learning is reflection, which in the case of simulation modeling can be gained by watching SP feedback in the classroom.

It is also very important to teach the SP to assess the student's response to the role rather than go out from the simulation process to solve any problems that may arise during the simulation, such as uncomfortable communication.

So, most medical schools that use simulated patients conduct a multicomponent assessment of the student at the practical session. Multicomponent assessment has the following components: teacher assessment, actor assessment, student-expert assessment (if his participation is foreseen), which contributes to a significant increase in objectivity. In addition to the specified criteria, the multi-component assessment may include additional points obtained by the student during

group solving of clinical tasks, additional answers to theoretical questions, etc., depending on the objectives and tasks of the lesson. Another component of a multicomponent assessment can be an assessment for defending one's work during a debriefing. Interesting is the practice in which the components of the assessment are not given points, but percentages of the maximum possible. The final multicomponent assessment in this case represents the arithmetic average of all assessments in percentages. After that, at the discretion of the methodologists of the institution, the final assessment can be converted into points according to traditional scales.

As for the evaluation during the exam, we suggest implementing the practice of using a special form – an evaluation checklist.

The options for such evaluation checklists for a regular class and an exam can vary significantly. But it is important that in all cases they are standardized. Examples of evaluation checklists are provided below.

The example of an assessment list at the practical session

Examination stage	Evaluation criteria	Remarks
Anamnesis	Consistency and completeness of anamnesis collection: a – everything is correct;¬ b – the most of the part is performed correctly; c – the most of the part is not performed or performed incorrectly. Key questions of anamnesis: a – all asked; b – the most of the questions were asked correctly; c – no possibility to make a conclusion about the pathology and/or its course	
Objective examination	Execution sequence: a – correctly; b – mostly correctly; c – there are fundamental deviations from the algorithm	
	Violations in the technique of performing certain examination skills: a – all steps are performed correctly; b – all steps are mostly performed correctly; deviations do not fundamentally affect the result; c – there are fundamental deviations from the algorithm	

Deontological aspects of the "doctor-patient" relationship	a – fully comply with ethical norms and algorithms of professional communication; b – some errors occur; c – there are great violations of the norms of professional communication	

The example of the examiner's checklist of the OSCE Station "Internal Medicine. Communication skills". A conversation with the daughter of a patient who died (from own archive)

Assessment criterion	Completed	Non-completed	Points
1. Preparing the patient's daughter for the interview			
He ensured that the conversation was conducted without outsiders			
He made eye contact			
He provided a possible not to be distracted by other patients and the mobile phone			
2. Clarification of information already known to the patient's daughter at the time of the conversation			
He asked what the patient's relatives already knew at the time of the conversation			
He analyzed the awareness of the relative and decided whether the relative is ready to continue the conversation in a constructive way (emphasized this)			
3. Assessment of the necessary volume and detail of information to be provided to the patient's daughter			
He asked whether the patient's relative is ready/ willing to receive complete and reliable information about the state of health			
4. Notification of information about the loss of a loved one to a relative			
He warned that he was going to deliver bad news			
He uses simple and understandable terminology when explaining information			
He does not use rude wording during the conversation			

He does not use additional depressing wording during the conversation			
He speaks important information at an adequate speed			
He speaks important information not monotonously			
5. Showing empathy (sympathy) for grief over the loss of a loved one			
He assessed the emotional state of the patient's relative (emphasized this)			
He provided an opportunity to show and express emotions			
He expressed sympathy			
He expressed words of support to his relative			
6. Summarizing the results of the interview, instructing on further necessary actions			
He summarized the information provided			
He gave recommendations on further actions			
He said goodbye			
Total number of points received			

Chapter 9

DEVELOPMENT OF THE SIMULATION SCENARIO AND THE ROLE OF THE SIMULATED PATIENT

Defining the aims of the study is the first step in development of the simulation scenario. The aim should reflect what needs to be assessed and/or what the student should learn during the simulation (eg, taking a thorough disease history, creating an examination plan, making a differential diagnosis). The simulation scenario can serve several educational purposes.

An ideal SP scenario should include a list of knowledge and skills that would allow students to demonstrate their abilities. After defining educational aims, students' expectations for performance are determined. The scenario should require students to demonstrate technical skills, analytical skills, interpersonal skills, and critical thinking skills.

The second step in the development of the SP scenario is to create a template for structuring the information on the clinical case. The template is a document that contains a concise summary of information about the role. Such a template ensures objectivity and consistency between the marks received by students. The scenario template developed by Association of American Medical Colleges (AAMS), which was the first to propose its creation, is presented below. The template contains all the important information for simulation modeling. This is a kind of synopsis of the scenario.

The third step in creating the SP role is to clearly describe it when giving students an assignment. We call this introduction a *briefing*. The briefing is one of the most important components of SP clinical case information. It is necessary to create conditions for students to feel the authenticity of the patient they will examine and that he is actually experiencing the described condition, illness or injury. The scenario should be as authentic as possible. The history should be presented from the patient's point of view.

SP Scenario Template: Concussion Assessment

Scenario section	Information about the patient
Gender and age	Male, 20 years old
Complaints	Sharp pain on the sides of the head, dull aching pain in the face
Key terms	Anamnesis, communication with the patient, assessment of the head/concussion, recommendations
Brief anamnesis	During a baseball game the other day, the patient slid into second base and collided with an opponent (face to knee). Immediately felt pain in the temporal area and in the face (it still persists). The headache also came immediately and still persists. At the time of admission to the reception department, the dizziness has subsided, but the patient is unable to recall most of the events that occurred after the injury. Tinnitus is noted, there are no visual and neurological disturbances. He takes an anti-asthmatic (bronchodilating) inhaler; college student majoring in business
Differential diagnosis	Concussion, subdural hematoma, epidural hematoma, cerebral contusion
Examination tasks	History taking, physical examination, diagnosis, notifying the patient of results and making recommendations
Equipment of the training (examination) room	Lamp, pen, spatula, examination gloves, otoscope, ophthalmoscope, sterile gauze swabs, disinfectant, soap
Requirements for an actor	A young man with an athletic build
Authors of the scenario	
Date of creation	

When creating the role, the developer must consider the situation through the eyes of the patient himself, which, according to the experience of many US medical schools, allows to approach the maximum realism of the simulation. The patient's main complaint (eg, elbow pain) and relevant aspects of the medical history and life history should be emphasized. The components of the scenario and the developed role should become: the mechanism of the development of the injury or the ways of the pathogenesis of the disease; details of the appearance of the first symptoms; duration of symptoms and features of their progression; frequency of symptoms (for a chronic disease); localization of symptoms; detailed description

of symptoms; the presence of radiation pain and other symptoms, their intensity; qualitative characteristics of pain, its intensity and localization; the presence of factors that aggravate or alleviate symptoms; the presence of factors that provoke exacerbation of the chronic disease, or provoked the acute condition.

Psychic and social history should also be mandatory components of the SP scenario and role; emotional state of the patient; peculiarities of attitude towards the doctor and other medical personnel; behavior (eg, irritability, anxiety, disinterest). It is important to indicate the expected results of the physical examination: body temperature, pulse, blood pressure, respiratory rate, normal and abnormal indicators of the general examination (presence of scars, rash, bruises, color of the skin or its individual areas, etc.), normal and pathological areas palpation (detailed areas of localization of pain, defence, etc., range of motion (presence of limitation of limb movement, limitation or strengthening of respiratory movements), anthropometric indicators, results of textbook muscle tests (muscle/group and degree of each muscle/groups), positive and negative results of special or stress tests, results of a blood circulation study, conclusions of the neurological examination.

It is necessary to understand that a clearly written scenario and role will help to prepare SPs as realistically as possible and conduct training as efficiently as possible. A full scenario plan is provided in Appendix B.

Chapter 10
PSYCHOTYPED SIMULATED PATIENT. ACQUISITION OF PROFESSIONAL COMMUNICATION AND SOFT SKILLS

Any communication outside the "comfort space" affects the emotional and psychological state. If in a normal situation, such reactions can go unnoticed even by the person himself, the communication with the doctor as a patient, in most cases, manifests the special type of reaction of a person, which is embedded in him. It is important to always remember that a patient's stay in a medical institution always increases any emotions, worries and stress. Manifestations of such emotions can be very different, depending on a person's character, life circumstances, peculiarities of upbringing and outlook on life. All this forms the corresponding psychotypes of patients. It is very important to always consider and respect the patient's unique personality, the entire possible range of his psychological and personal traits, as well as the current emotional state when communicating with the patient.

The doctor cannot solve all the patient's problems, but he can and should find out not only physical complaints, but also the causes of psychological discomfort, and provide effective help. Therefore, in order to involve the patient in the effective participation in the recovery process and obtain a positive result of the treatment, it is very important for the doctor to understand the basic laws of the human psyche and possess skills that allow to bring the patient into a balanced state, effectively overcome the patient's emotions and prevent the development of unwanted psycho-emotional reactions.

Communication skills are an important part of medical education and a doctor's life as a whole. The use of SPs in the process of learning these skills is an indispensable practice in mastering the art of communication.

Playing the role of a certain psychotype of a person is one of the most difficult tasks even for an experienced actor. Therefore, for the implementation of communication skills classes, to obtain an effect, it is necessary to create a base of professional actor-patients. Such SPs are the most valuable.

In order to organize the process of teaching communication skills with the participation of SPs, firstly, we propose to outline the range of the skills that must be mastered. In our practice, we have identified the following types of skills that can be applied at all stages of consultation:

1. Content skills – content of questions and answers, collected information and its communication.

2. Process skills – ways of communicating with the patient, verbal and non-verbal communication skills.

3. Perception skills – the doctor's ability to compassion, respect, attentiveness; ability to make decisions, mastery of clinical thinking.

After delineating the range of types of skills, it is necessary to decide on the standards by which training will take place. In order to master the selected standards, we introduced several separate elective disciplines in the psychology of communication and professional communication:

1. "Professional medical communication" for 4th year students. SPs are involved in mastering the method of effective actions "three-stage rocket" (Nils Grenstad) and the C–L-A-S-S protocol.

2. "Professional communication skills in extreme situations" for 5th year students. SPs are involved in mastering the protocols of C-O-N-E-S, E-V-E, B-U-S-T-E-R, assertive behavior, practicing anger management skills, and algorithms for doctor interaction with victims in extreme situations.

3. Notification of bad news. SPIKES protocol communication. 6th course.

Before students begin to master communication skills based on SP scenarios, we consider it necessary to practice with students such special communication tools as non-verbal skills, effective communication skills, active listening skills, and assertive communication.

The importance of non-verbal communication during the entire communication between the doctor and the patient cannot be overestimated. The patient's non-verbal signals can be recognized by voice, facial expressions, emotions and posture. It is important to remember that the doctor, through non-verbal signals, can actively influence the course of the consultation and give the communication the necessary movement. If verbal information has clear boundaries, we know when the message is over, non-verbal communication is continuous throughout the meeting.

All our sense organs can perceive these signals. Words are more effective in conveying certain information when communicating our thoughts, while non-verbal communication conveys our attitudes and emotions.

The most important non-verbal signals for a doctor include:

– body position and posture (sitting, standing, straight, relaxed, tense, open or closed position, etc.);

– the distance between interlocutors and their relative location;

– characteristics of physical contact between the doctor and the patient (handshake touch, patting, tactile contact during physical examination);

– "language of body movements": gesturing, laughing, nodding, hand and leg movements;

– facial expressions (raised or frowning eyebrows, smiles, tears, etc.);

– gaze (eye contact, alert or distracted gaze, etc.);

– voice (pitch, speed of speech, volume, rhythm, silence, pauses, intonation, errors, etc.);

– time management (early, late, on time, procrastination, haste, slow reaction, etc.);

– appearance (figure, clothing, well-groomed, etc.);

– location (placement of furniture, lighting, temperature, color).

Assertive behavior skills are necessary for mastering *anger management.* The main components of anger management are:

1. Avoidance and time-out: leaving the situation and reducing contact with the trigger in situations in which anger begins to grow and approaches the "explosion point".

2. Management of bodily anxiety: mindfulness, relaxation.

Mindfulness includes several steps:

1) "scanning the moment": give yourself a few seconds to carefully observe what is happening now as an observer "from the side";

2) broadening the spectrum of attention: what is happening around at this moment in time;

3) ascertaining and naming one's emotions and thoughts at the given moment in time;

4) "breathing music": observing one's own breath, imagining that the breath reflects a melody and trying to sing it; if there are conditions, add some movements to the singing.

3. Working with thoughts (distancing).

4. Formation of life skills of assertiveness and the ability to resolve conflicts.

5. Forgiveness.

The term "assertiveness" was proposed by the American psychologist Andrew Salter in the 50s of the 20th century.

An assertive person understands and expresses his emotions and feelings, formulates and openly expresses his own opinion, protects and defends his own rights and interests, does all this with respect for the rights and interests of others. Therefore, the components of *assertive behavior* are:

1. Non-verbal: eye contact, body position, gestures, facial expression, tone and pace of speech, friendliness.

2. Confirmation of "Good time to talk".

3. Expressing feelings with taking responsibility for them: "I'm angry..., I don't like it...".

4. A conversation with the patient about his important needs with a request for something: "I want to ask you..., it is important for me...".

Effective communication is characterized by the following principles:

1. It is based on interaction, and not on the direct transfer of information. It is very important to know how the message affects the interlocutor, the goal of communication is to achieve mutual understanding.

2. Eliminates uncertainty, which distracts attention and interferes with the accuracy and efficiency of relations. So, patients do not know what to expect from the consultation, how important certain issues are, so an open discussion about the choice of treatment is useful.

3. Requires planning and thought to achieve results.

Grenstad's "three-stage rocket" method. With this technique, you can learn to respond to the obvious and be short and specific when finding the right words.

1. On the first step, the observer ("I") meets the object:	I, the observer, perceive the object, that is, I see, hear, feel, smell, thanks to which I meet with obviousness. "I see you frown when You talk about your health."

Continuation of Grenstad's "three-stage rocket" method

2. On the second step, from what I observe and perceive, I project my anxiety onto this object	I project: "I think", "I assume", etc. "I think it annoys You".
3. On the third step, the observer ("I") gives a personal answer, that is, notes how this experience resonates in him:	I answer personally, for example, "I'm surprised", "I'm worried", etc. "I want to help you. I appoint you to make an examination. I will tell you in detail how and where to do it".

After mastering the basic communication skills, mastering the protocols will become much clearer and more efficient.

The simplest protocol used between doctor and patient, and which we propose to adopt as the basic standard, is the C–L-A-S-S protocol.

C-L-A-S-S protocol

1. Context. Organization of the communication process	**Space organization:** – a warm, bright room; – free of a large number of papers, etc. table; – ask the patient to sit at the end of the table so that the table is not a barrier; – placement of relatives or accompanying persons a little further from the network with the patient; – it is desirable to have napkins, drinking water, etc.
	Doctor's organization: – appearance of the doctor (neat clothes, open posture, eye contact, friendly tone of voice that matches the facial expression); – external triggers (phone on silent mode, etc.); – internal adjustment (respect, empathy, non-judgement, competence); – prior notification of the patient about time limits (if any).
2. Listening skills. Effective listening to gather information	• Establishing contact. • Clarification of the reason for the appeal. • Clarification of the patient's complaints and the reasons for contacting the doctor "today". • Listening attentively to the patient, without interrupting, which will allow you to finish the story. An important component of effective listening – Active Listening (the EVE Protocol), an attentive relationship-building behavior: – open body position; – give space (distance);

Continuation of C-L-A-S-S protocol

2. Listening skills. Effective listening to gather information	– eye contact; – tone of voice, facial expression; – appropriate pace; – encouragement: verbal/non-verbal – nodding with the head, appropriate facial expressions, gestures, use of exclamations "huh", "yes"; – clarification, summaries of received information; – display of emotions/feelings.
3. **A**cknowledge. Research, identification of the patient's reaction. Reflection of the patient's feelings	• Trying to understand the patient's thoughts about the disease, his attitude to the disease. Expectation that he wants to get help. Consequences, impact of the problem on life. • Use of non-verbal language: eye contact, facial expressions, posture, gestures, pace, voice volume, intonation. • Verbal language: paraphrasing, clarification, clarification • Delicacy during the examination, involving the patient in the form of explanation of his actions during the examination. • Empathy, kindness, respect, attentiveness, the importance of the patient's own activity
4. **S**trategy. Explanation and planning. An examination and treatment plan agreed with the patient	• Providing the necessary information in the required amount and in an understandable form. • Asking the patient what other information is useful to him. • Capturing the patient's words and gestures based on the doctor's recommendations. • Clarification of opinions, the importance of the doctor's recommendations for the patient. • Avoidance of "professional jargon". • Provision of written information, instructions. • Information about side effects. • Detailed information about future examinations. Explanation in "plain language" their necessity and features of obtaining results. • Checking the patient's understanding of this information. Coordinate the treatment plan with the patient. Decide what treatment plan will be best for the patient.
5. **S**ummary. Completion of the consultation. Resume	The doctor's role: – mastery of clinical thinking and the technique of logical presentation of information; – helping the patient to independently choose an examination or treatment option; – helping the patient move in the direction of the desired changes • A clear and concise summary of the discussion. • Checking the patient's understanding. • Finding out whether the patient still has any questions for the doctor • Making a clear agreement with the patient about follow-up visits, which the patient will adhere to

C-O-N-E-S ("Acute Conversation") protocol is a standard for communication in the event of medical errors, deterioration of the patient's condition during treatment, or for communication with relatives of a deceased patient.

C-O-N-E-S protocol

1. Context. Process organization	**Space organization:** – a warm, bright room; – the table free of a large number of papers, etc.; – ask the patient to sit at the end of the table so that the table is not a barrier; – placement of relatives or accompanying persons a little further from the network with the patient; – it is desirable to have napkins, drinking water, etc.
	Doctor's organization: – appearance of the doctor (neat clothes, open posture, eye contact, friendly tone of voice that matches the facial expression); – external triggers (phone on silent mode, etc.); – internal setting (respect, empathy, non-judgement, competence); – prior notification of the patient about time limits (if any); – special attention to non-verbal signs (nods, sighs, tears, gestures, posture of the patient) in order to assess the emotional state of the patient and his relatives; – keeping calm and a "cold mind" by the doctor under any circumstances.
2. Opening shot. Obtaining permission to discuss. Explanation of facts	· Warning the patient about the need to talk. · Notification of the patient and his relatives about the presence of important news. · Clear classification and indication of intentions (warning the patient that things are not so good). · Explaining the facts in such a way that the patient understands them. · Dosage of information with a check of its complete understanding by the patient after each piece of information.
	· Verbal and non-verbal skills (see above)
3. Narrative Approach. Chronology	· Explanation of the chronological sequence of events. · Avoidance of blame or excuses. · Emphasizing that the doctor is finding out how the error happened. · Apologizing (if necessary).

Continuation of C-O-N-E-S protocol

4. Emotions Empathetic reaction	The doctor's ability to kindness, respect, attentiveness, empathy. · Paying attention to non-verbal signs (nods, sighs, posture, gestures, tears) to assess the emotional state. · Giving the patient time to understand the news. · Compassionate silence, showing empathy. · Encouraging the patient to ask questions, asking the patient to tell about his thoughts, feelings that arose in response to the news. · Avoiding promises that cannot be fulfilled. · Avoiding patient assurances that everything will be fine, that there will be no harm. · Informing the patient that the situation is a priority, that everything possible will be done
5. Strategy Choosing a specific plan of action	· Clear and concise summaries of the discussion. · Checking the patient's understanding. · Finding out whether the patient still has any questions for the doctor. · Conclusion of a clear agreement with the patient on follow-up visits, which the patient will adhere to
In case of death of the patient	Showing empathy

In order to successfully conduct difficult emotional conversations with the patient and his relatives, the doctor must be familiar with the B-U-S-T-E-R protocol. It includes several stages.

B-U-S-T-E-R protocol

1. Be prepared. Space for conversation	· Paying attention to comfort and non-verbal skills, the doctor's body position and tone of voice are very important. · Conducting a conversation in a quiet, calm place. · Willingness to talk and predict the reaction of the patient and his family members. · Placement of the patient sitting from the end of the table so that the table is not a barrier. · Placement of relatives or accompanying persons a little further from the network with the patient. · Availability of napkins, drinking water, etc. is desirable. · Appropriate appearance of the doctor.

Continuation of B-U-S-T-E-R protocol

1. Be prepared. Space for conversation	· Disabled or neutralized external triggers. · Internal setting of the doctor. · Practicing self-regulation as a doctor. · Keeping the doctor's own emotions under control. · Settings for turning confrontation into a conversation.
2. Use non-judgmental Listening.	· Understanding that it is not about you, but about other peoples' disappointments, fears, anxieties that lie at the basis of anger. · Supporting eye contact. · Listening without interrupting the patient, with paraphrasing in case of misunderstanding, clarification
3. Six second rule.	· Avoidance of conversations escalation · Waiting before demonstrating a reaction of 6 or more seconds in a situation where one's own emotions begin to "boil". · Mindfulness. · Avoidance of defence position
4. Tell me more.	· The use of method: "Tell me more"
5. Empathize and validate.	· Paying attention to non-verbal signs. · Compassionate silence. · Giving the patient time to understand and accept the situation. · Showing empathy. · Stimulating the patient to ask questions. · Elucidation of the patient's thoughts and feelings
6. Respond with a wish statement. Completion of consultation and recommendations. Important advices	Avoiding phrases: "Everything will be ok", "I feel your pain" When emotions intensify and a sense of threat appears: "I don't feel safe now and I can't continue conversation"

Modern approaches to the understanding and classification of personality disorders are reflected in the DSM-5, ICD-10 classification:

– Cluster A. Paranoid, schizoid, schizotypic.
– Cluster B. Antisocial, borderline, hysterical, narcissistic.
– Cluster C. Avoidant, dependent, obsessive-compulsive.

Based on this classification, we formed the following psychotypes of difficult patients for training, for which we developed cases, scenarios and roles:

1. Hostile patient.
2. Anxious patient.
3. Hypochondriac patient.
4. Sad patient.
5. Manipulative patient.
6. Suspicious patient.
7. Closed patient.
8. Talkative patient.

Fragments of the scenario and the suspicious patient's roles

General information:

During communication – painfully vulnerable, has a heightened sense of justice. Characterized by excessive sensitivity to failures, inability to forgive insults, suspicion and tendency to inadequate perception of reality due to the interpretation of neutral or friendly actions of the environment as hostile or contemptuous. Such persons often have an ingrained confidence in their own rightness, overestimated self-esteem and excessive arrogance. Reluctant to open up to others due to an unreasonable fear that it may be used against him. Common features are social awkwardness and distorted thinking.

SP behavior:

The movements of a purposeful, energetic person. Firm speech, persistent voice, possible scepticism, excessive arrogance. He can express his suspicions or keep silent.

Recommendations for the student:

– *choose a communication protocol;*
– *organize the process of communication with the patient in accordance with the selected protocol;*
– *start communication, be sure to warn the patient about data confidentiality;*
– *when the patient is emotionally tense, verbalize his assumptions.*

The role (the variant for a patient)

The female patient, Mrs. Maria, has a severe complicated type 2 diabetes. The endocrinologist invited the surgeon to the ward for a consultation regarding the need to amputate part of the foot. The patient is lying in bed, has a neat appearance, reads a medical reference book, underlining something in it with a pencil, and looks at the doctor in disbelief.

The doctor, entering the patient's room, greeted her, sat opposite the patient in preparation for the conversation, removed all possible barriers (desk calendar, etc.), switched the phone to silent mode, demonstrated active listening skills.

***Doctor:** "Good afternoon, ma'am. I am a surgeon. My name is ... I will consult You at the request of Your treating doctor. How can I address You?"*

***Mrs. Maria:** "Maria. Yes, the endocrinologist told me that your consultation is necessary."*

***Doctor:** "Mrs. Maria, please tell me what worries you, what do you think about your condition now?"*

***Mrs. Maria** (a little annoyed): "My leg bothers me, nothing helps. I think the treatment was wrong!"*

***Doctor:** "I see that you are annoyed, but I really want to help you. Tell me, how do you feel now?"*

***Mrs. Maria** (alert): "You are so young. Do you really have enough experience to help me? And I also wonder if you will not talk about me with someone and tell about me everything that I tell you?"*

***Doctor:** "This information is confidential, I need it only to better understand you and try to help you. We will work together to overcome your problem. Do you agree?".*

***Mrs. Maria** nods: "My grandfather had diabetes, he had gangrene, he was treated incorrectly, and then he died (pause)."*

***Doctor:** non-verbal expression of sympathy (pause) "Can we continue the conversation?"*

***Mrs. Maria** (nods).*

The doctor examines the patient's foot. Then he takes the medical history and reveals the results of the preliminary examination.

***Doctor:** "I have the results of the examination. Would you like to receive complete information about the results of the examination, or would you like to briefly note the results and discuss the treatment plan?".*

***Mrs. Maria:** "Of course, full information."*

***Doctor:** "Unfortunately, I have bad news for you, diabetes has caused complications, you need an operation. It is necessary to remove part of the foot due to the fact that part of the tissue is dead. You have gangrene."*

***Mrs. Maria:** "Only part of the foot? Are you not hiding anything from me?"*

***Doctor:** "No, I am not hiding anything from you. Do you have any questions? Can you tell me how you feel now?"*

***Mrs. Maria:** "Yes (pause)."*

***Doctor** (sympathetically and affirmatively): "Are you ready to discuss the plan of surgery and treatment now?" If you have any questions, I will answer them".*

***Mrs. Maria:** "Yes."*

The doctor tells the patient all the stages of preparation for the operation, the shortened course of the operation and possible consequences.

***Mrs. Maria:** "Thank you, doctor, but I have to think a little and consult with someone."*

If the two previous protocols are simple enough to be mastered by students of 3–4 years, in the process of training 6th year students and interns we use the SPIKES protocol, which is certainly more difficult to master and requires more skill from the doctor, but it is much more detailed and is considered worldwide the "gold standard" of bad news notification and should be mastered. The protocol includes 6 steps.

Bad news is best described by Cassem in 1975: "Any information that seriously and negatively affects an individual's perception of his or her future."

SPIKES protocol

Step 1. S – SETTING UP the interview.	• Organization of communication with the patient alone. If a conversation with the patient in a separate room is not possible, it is advisable to fence off the patient's bed with a screen. • Involvement of people important for the patient in the conversation. Most patients want someone else to be present in the conversation, but that choice is up to the patient. If there are many family members, it is necessary to ask the patient to leave one or two closest relatives. • The best position for the doctor when talking is sitting next to the patient (but not on the bed). This will allow the patient to psychologically relax and give a non-verbal signal that the doctor will take his time in the conversation.

Continuation of SPIKES protocol

Step 1. **S** – SETTING UP the interview.	· Removing barriers between the doctor and the patient (for example, in the form of a table). · If the examination of the patient has just taken place, the patient must be given an opportunity to get dressed before starting the conversation. · Management of the doctor by time constraints and distractions. The patient should be informed in advance about the time limit and the expectation that the doctor will be distracted from the conversation, if this can actually happen. It is best if the doctor turns off his phone during the conversation and asks his colleagues not to disturb him for a while. · Establishing communication with the patient. Maintaining eye contact can be uncomfortable, but it is an important way to create rapport between doctor and patient. The doctor touching the patient's hand, or holding his hand (if it is comfortable for him), or using other non-verbal signs is desirable to achieve understanding.
Step 2. **P** – Assessing the Patient's PERCEPTION. Assessment of the patient's perception (understanding) of the seriousness of his condition	Implementation of the axiom "before you say – ask": · Clarifying the patient's opinion about his illness and condition with the help of open questions. Finding out what the patient already knows, what he fears and what he hopes – a difficult but necessary task. · Assessment of the level of understanding of the patient and family members. Determining whether the patient has some form of disease denial: wishful thinking; omission of essential but unpleasant details of the illness, or unreal expectations from treatment. · Paying attention to discrepancies in the patient's understanding of the real situation. · Correcting the patient's existing misinformation about the disease in general to deliver bad news considering that the patient does not understand.
Step 3. **I** – Obtaining Patient's INVITATION. Obtaining permission to discuss	Continuation of the implementation of the axiom "before you say – ask": · Setting goals for the discussion – asking the patient if he wants to know the details of his health and treatment. · A clear classification and defining of conversational intentions. (warning the patient that things are not so good) · Recognition of the patient's right not to know about the severity of the disease. If the patient does not want to know the details, it is necessary to invite him to answer any questions that interest him, which will appear in the future, or to talk to relatives and friends.

Continuation of SPIKES protocol

Step 4. **K** – Giving KNOWLEDGE and Information to the Patient. Granting information to the patient	· Warning the patient that he is being told bad news before directly telling the news itself. This makes it possible to reduce the shock of their subsequent receipt and facilitate an easier understanding of the received information. · The conversation should be started at the level of understanding and vocabulary of the patient. Avoiding "medical jargon" when explaining the facts promotes full understanding by the patient. · Avoiding the use of excessive "dumbing down" ("You have a very bad cancer and if you don't get treatment immediately you will die"), as this will lead to the resignation of the patient and subsequently provoke aggression towards the doctor with a tendency to blame him as the bearer of bad news. · Dosage of information. After each piece of information, it is necessary to check whether the patient understood everything. · Avoiding when communicating such phrases as "We can do nothing more for you" in cases when the prognosis for the patient is poor. In most cases, this position is incompatible with the real goals of the patient, which are often come to improving the quality of life: the absence of pain and other symptoms of the disease.
Step 5. **E** – Addressing the Patient's EMOTIONS with Empathic Responses. Compassionate attitude towards the patient's emotions. Empathetic reaction	Empathy consists of four steps: · Determining the emotions that the patient feels by naming them for himself. Using open questions to understand what the patient is thinking or feeling. · A look at any emotions from the patient. It can be tears, a sad look, silence or shock. · Determining the cause of these emotions. This is usually associated with bad news. But there is no certainty in this, it is necessary to ask the patient about it again. · Giving the patient a short period of time to express their emotions using compassionate silence. Stimulating the patient to ask questions. An ability to inspire, even if the prognosis is bad (effective analgesia, care).
Step 6. **S** – STRATEGY and SUMMARY. Explanation and planning. End of consultation	At this stage, the doctor's own discomforts can be maximally manifested: uncertainty about the patient's expectations, fear of destroying the patient's hope, fear of one's own powerlessness in front of an uncontrollably progressive disease, lack of confidence that the doctor will be able to manage the patient's expected emotions, and sometimes the confusion of the previously optimistically depicted prognosis for the patient.

Continuation of SPIKES protocol

Step 6. **S** – STRATEGY and SUMMARY. Explanation and planning. End of consultation	In order to prevent this, it should be clearly understood: patients who clearly imagine their future are less likely to experience anxiety and uncertainty. This step includes the following stages: • Finding out the patient's readiness to discuss the treatment plan at the moment of the conversation. • Providing the necessary information in the required amount and in an understandable form. Telling the patient about all the treatment options and when each is used to give the patient the impression that the doctor considers the patient's wishes important. Dividing decision-making responsibility with the patient may also reduce any sense of failure on the part of the physician when treatment is ineffective. • Checking the patient's lack of understanding of information to prevent the tendency of patients to overestimate the effectiveness of treatment or misunderstanding as for the purpose of treatment. • Capturing the patient's words and gestures based on the doctor's recommendations. Clarification of opinions, the importance of the doctor's recommendations for the patient. • The end of the consultation should be accompanied by a patient-approved follow-up plan, or by setting a clear time for a follow-up conversation to obtain the patient's final decision after a short period of reflection.

Chapter 11
PSYCHOLOGICAL SUPPORT OF STANDARDIZED PATIENTS

Like any other profession, an actor-patient carries certain risks and can have an indirect negative impact on health. External risks are visible and quite clear to everyone: unstable employment, fear of being in low demand. However, internal problems may be invisible to an outsider. They include constant tripping, "entering the role" of the patient with the appearance of real signs of the disease, the development of a depressive state. Many authors who conducted research on the psychological state of actors concluded that depression in actors is diagnosed twice as often as in representatives of other professions. Despite the fact that similar studies have not been conducted with standardized patients, we believe that actors who constantly play the role of a patient are prone to depression much more often.

Anxiety, stress and depression in standardized patients (as in any actors) is a consequence of the fact that they experience certain emotions without which it is impossible to play the role and faithfully portray the character, and in addition, they are to reproduce these emotions many times.

Steven Brown, a specialist in the Department of Psychology and Neurology at McMaster University, conducted a study of the causes of stress in the theater school students. He singled out 3 main risk factors that affect actors in the process of dramatic identification with a stage character:

• Inability to separate from the role, getting stuck in the psychological status of one's character.

• Emotional instability as a result of the absence of this separation.

• Psychological injuries caused by the actors' reference to their personal stories. In order to evoke the emotions necessary for the play, the actors "call up" their own experiences from the past.

Brown explains that actors often cannot get rid of the emotions associated with their characters. The fictional person whose image the actor creates on the stage becomes his shadow. The boundary between the artist's own "I" and the hero of the play or film is erased, and the merging

of the personalities of the character and the actor takes place not on the stage, but in real life. This negatively affects the psyche and nervous system and, as a result, leads to various tragedies.

This study involved actors performing conventional roles. However, for actors who portray patients, the influence of all these factors increases many times over. Depending on the personality traits and temperament of the actor-patient, the fear of bodily sensations may occur in a panic disorder, or various manifestations of anxiety (from the fear of a serious illness to the fear of own thoughts), which may occur in the obsessive-compulsive disorder. Such fear can have a significant impact on the life of the actor-patient and cause a feeling of helplessness or depression, and if it lasts for a long time, lead to disablement.

A constantly elevated level of adrenaline during anxiety disorders in standardized patients causes changes in the body that initially allow them to cope with danger, but over time, such changes result in persistent, often painful, muscle tension, rapid breathing and heartbeat, and significant sweating. Many standardized patients begin to focus attention on these manifestations and interpret them as signs of a serious disease. In addition, an actor who constantly repeats the same role of a patient many times can begin to relate his role to real life and find similar symptoms in himself.

In order to prevent the complications of the profession described above, it is necessary to immediately discuss with them the possibility of developing similar conditions in the process of training standardized patients.

Besides, a specialist in an educational institution who works with standardized patients should use special techniques for them, which were developed for actors who play tragic roles. These methods allow to quickly "get out of the image" without a psychological trauma. Methods of work on psychological relief include various practices. It can be a group meeting after the working day, at which the actors talk about the process of communication with the students and what they felt during the visit to doctors and what emotions they feel at the time of the meeting. Such prevention makes it possible to get rid of the experiences associated with the character. An ability to separate from the image is necessary to help the actor keep mental and physical health.

Psychologists who work with professional theater actors use deep breathing, visualization, and physical relaxation techniques taken from yoga. Such practices may also be involved for standardized patients.

One of the forms of visualization, which includes ritual "undressing": the actor takes off the stage costume, says goodbye to the character, is recognized as one of the most effective practices. The same is done in the make-up room – the make-up is removed and the parting scene is played.

In order to implement this method of preventing psychological disorders in standardized patients, we propose to introduce an important rule that must be followed by all actor-patients: never portray the role in the usual clothes that the actor wears in real life. For the role of the patient, it is necessary to select several sets of clothes that will be used only when playing the role of the patient (pyjamas or a robe for a patient in bed, ordinary clothes for a patient in the polyclinic department).

Using different techniques in the right sequence helps actors to separate their own "I" from the fictional personality. They give the actor an opportunity to leave outside of the dressing room not only the make-up and costume of the hero, but also his feelings, problems, and attitude towards people.

If a standardized patient, despite the preventive measures, has certain undesirable psychological conditions, the teacher who works with them must know the first symptoms of the problems well, and possess the techniques of "quick psychological aid".

The first symptoms of psychological problems that arise can be disturbing thoughts that tend to repeat, become obsessive and begin to affect the actor's quality of life. He begins to be afraid of thoughts about diseases, worries that they may occur in him, about what can cause harm, violence by his actions to his family members and others. The manifestations which are worth of special attention:

- Compulsions or rituals. The actions that the actor believes must be performed.
- Avoidance behavior – attempts to avoid certain situations, people, things.
- The need to keep everything under control. This strategy increases anxiety because it is impossible to be 100 percent certain.

With the development of these signs, rehabilitation does not consist in avoiding thoughts, but giving them a different meaning, being able to

identify useful and unhelpful thoughts, recording and analyzing one's actions, their reasons, the desired result and resources that provide support.

The signs of excessive health anxiety are:

– seeking reassurances about own health;

– "detection" of certain symptoms;

– constant search for information about the disease that the actor portrays;

– acquisition by the actor of the patient's behavioral traits.

When these signs are detected, rehabilitation should consist of the following steps:

· Distinguishing between "symptoms" that require medical intervention and those that do not.

· Distraction from the disease (hobby, walking).

· Stoppage of constant searching for information about the disease simulated.

· Increase in physical activity.

· Making a list of things that the actor used to do and would like to do again.

Ordering them: things that require less energy – first, and things that require the most effort – last. Returning to normal activity step by step.

During a panic attack and to reduce excessive muscle tension, relaxation training with the practice of breathing control is quite effective, which includes the following commands: "Breathe calmly and slowly. Take air into your lungs. Your belly should also bulge. As your muscles stretch, you may feel a tightness in your chest. Do not breathe shallowly, with the upper part of the chest. Inhale through the nose and exhale through the mouth. Try taking a slow breath at 1, 2, 3, 4. Then exhale slowly to the count 6. Do this until you feel calm." The technique of distraction is also effective during a panic attack: instead of focusing on what is happening inside the body, it is necessary to switch attention to what is happening around.

So, for the successful implementation of the "Simulated Patient" method in the educational process, the SP manager must consider all possible psychological risks, as well as methods of countermeasures and "psychological first aid".

Chapter 12
TECHNICAL REQUIREMENTS FOR THE ORGANIZATION OF THE TEACHING PROCESS

The approach to equipment and logistical support of the educational process using the "Simulated patient" method is currently standardized around the world and includes the following requirements:

1. Microclimate. It should be a separate, in good light conditions, warm (24–25 °C) room with good sound insulation.

2. The interior of the study room should be as close as possible to the real room – a bed, a cabinet, a wardrobe for linen and clothes, one or two chairs, a washbasin; or the office of a family doctor (doctor of a polyclinic) – a couch, a doctor's table, a box for papers, two or three chairs, a hanger for the patient's clothes, a sink.

The main goal of this approach to the arrangement of rooms for standardized patients is to create an environment of trust between the student-curator and the actor-patient, to reproduce the conditions of the feeling of loneliness, which allows to significantly reduce the stress before starting work, which always arises, to add together with the feeling of relaxation and naturalness in behavior of the student's understanding that he will have to rely only on himself.

3. A necessary set of medical devices:

– tonometer, medical thermometer, centimeter tape, phonendoscope, sterile posable spatula, pulse oximeter, electrocardiograph or patient monitor – to simulate a hospital ward;

– tonometer, medical thermometer, centimeter tape, height meter, scales, phonendoscope, sterile disposable spatula, pulse oximeter – to simulate a doctor's office in a polyclinic;

– situational equipment when simulating an accident on the street.

4. Equipping the room with a rotating video camera with remote control and a high-sensitivity microphone, which will allow the teacher,

examiner, or expert student to observe and hear everything that happens in the classroom and make a high-quality video recording.

Actors and students must always be warned in advance about video recording despite the possibility of the "camera effect", which usually disappears within 1–2 minutes.

Audio and video information is sent to the "operator's room", in which an observer monitors in real time what is happening in the training room.

If contact with a standardized patient occurs within the scope of the exam, the student should not know who is observing him to exclude any claims and accusations of bias, or "agreements".

It is important to explain to the students a few additional recommendations that will contribute to increasing the comfort of communication and facilitate the establishment of the first contact with the patient. These aspects should be included in the evaluation sheet in the communication skills assessment scenarios:

1. Neat appearance and cleanliness of the doctor's clothes. Appropriate clothing for the status of a doctor (not a bartender or a show business employee).

2. Minimal use of cosmetics, it is desirable to avoid perfumes during work, neat manicure.

3. Appropriate (friendly, calm) facial expression.

4. Communication with the patient immediately after entering the premises should not begin with the collection of anamnesis or complaints. The student should be taught to give the patient the opportunity to get used to himself and adjust to the work: from the beginning it is necessary to introduce himself, wash his hands, take a comfortable place next to the patient on the chair to the right, facing the patient's head (a very rude mistake is the doctor sitting on the patient's bed), and with an opportunity seeing the whole patient to assess individual symptoms and facial expression of the patient.

5. The ability to change the patient's mood for the better, reduce his irritability and vulnerability, add confidence in a positive outcome. The student should learn to make it clear to the patient that recovery is in the patient's own hands, provided that the doctor's recommendations are strictly followed. Besides, it should be clearly understood that the patient

does not appreciate "brotherhood" with the doctor, but a serious and caring relationship.

6. In some scenarios, provocative questions from the SP are provided to lead the student away from the topic of conversation, verbosity. The student must be able to respond correctly and return communication within the necessary limits.

7. A doctor should never take on more than he can give to a patient. Always tell the truth about the limits of your capabilities in this particular situation. In addition, you should never use such phrases as, for example, "this is nonsense that will soon pass away." You should never give a patient a diagnosis of which the doctor is unsure. It is extremely undesirable to talk down to the patient and to use a lot of terms incomprehensible to the patient in the conversation.

We hope that these guidelines will help organize the Simulated (or Standardized) Patient program in the best possible way.

QUESTIONS FOR SELF-CONTROL

1. Who first suggested using trained actors as “patients”?
2. What is the difference between the concepts of “simulated patient” and “standardized patient”?
3. Name the levels of simulation realism.
4. How are standardized patients classified by the amount of simulation?
5. What is the difference between a hybrid standardized simulated patient and a psychotyped standardized simulated patient?
6. How many directions of standards are there in the organization of the educational process of the institute of standardized patients?
7. What key factors do AMEE experts recommend to use when selecting candidates for the role of patient-instructors?
8. What are the main responsibilities of a manager of standardized patients?
9. Name the main factors for maintaining the motivation and professionalism of standardized patients.
10. Which specialist is better to appoint as the head of the unit?
11. What functions does a methodologist perform?
12. What is a clinical case?
13. How is the participation of a simulated patient in the assessment carried out in most medical schools around the world?
14. What is the purpose of the Incognito Standardized Patient (ISP)?
15. What types of feedback can be implemented in the “Simulated Patient” method?
16. From what points does the check list of the OSCI station examiner usually consist?
17. How is the acquisition of professional communication skills and soft skills?
18. What is the “three-stage rocket” method of Nils Grenstad known for?
19. What does the C-O-N-E-S protocol consist of?
20. What protocol is used to successfully conduct difficult emotional conversations with the patient and his relatives?

21. What is the purpose of the SPIKES protocol?
22. What are the three main risk factors affecting the actors in the process of dramatic identification into a stage character?
23. What are the methods of preventing psychological disorders in simulated patients?
24. Name the technical requirements for the organization of the learning process.

REFERENCES

1. Adamo, G. (2003). Simulated and standardized patients in OSCEs: achievements and challenges 1992–2003. *Medical teacher*. 25(3). 262–270. https://doi.org/10.1080/0142159031000100300
2. American Educational Research Association (AERA), American Psychological Association (APA), National Council on Measurement in Education (NCME). The standards for educational and psychological testing.
3. Association of Standardized Patient Educators. About ASPE. Available from: http://www.aspeducators.org/about-aspe (Accessed 12 June 2017).
4. Barrows, H.S. (1968). Simulated patients in medical teaching. *Canadian Medical Association Journal*. 98(14). 674.
5. Barrows, H.S. (1982). Letter to Henk Schmidt. Rotterdam : Private Archive Collection of H. G. Schmidt.
6. Barrows, H.S. (1993). An overview of the uses of standardized patients for teaching and evaluating clinical skills. AAMC. *Academic medicine* : journal of the Association of American Medical Colleges. 68(6). 443–453. https://doi.org/10.1097/00001888-199306000-00002
7. Barrows, H.S. (1996a). In memoriam: James E. Anderson, MD. *Teaching and Learning in Medicine*. 8(1). 61.
8. Barrows, H.S. (1996b). Problem-based learning in medicine and beyond: A brief overview. *Teaching and Learning*. 68. 3–12.
9. Barrows, H.S., & Bennett, K. (1972). The diagnostic (problem solving) skill of the neurologist: Experimental studies and their implications for neurological training. *Archives of Neurology*. 26. 273–277.
10. Barrows, H.S., & Mitchell, D.L.M. (1975). An innovative course in undergraduate neurosciences, experiment in problem-based learning with 'problem-boxes'. *British Journal of Medical Education*. 9. 223–230.
11. Barrows, H.S., & Tamblyn, R.M. (1976). Guide to the development of skills in problem-based learning and clinical (diagnostic) reasoning. Monograph #1. McMaster University Faculty of Health Sciences.
12. Barrows, H.S., & Tamblyn, R.M. (1980). Problem-based learning: An approach to medical education. New York : Springer.
13. Beckmann, C.R., & Meyers, K. (1988). Mental and physical effects of being a gynecologic teaching associate. *The Journal of reproductive medicine*. 33(1). 22–24.

14. Beckmann, C.R., Barzansky, B.M., Sharf, B.F., & Meyers, K. (1988). Training gynaecological teaching associates. *Medical education*. 22(2). 124–131. https://doi.org/10.1111/j.1365-2923.1988.tb00422.x
15. Benbassat, J., & Baumal, R. (2001). Teaching doctor-patient interviewing skills using an integrated learner and teacher-centered approach. *The American journal of the medical sciences*. 322(6). 349–357. https://doi.org/10.1097/00000441-200112000-00008
16. Benbassat, J., & Baumal, R. (2002). A step-wise role playing approach for teaching patient counseling skills to medical students. *Patient education and counseling*. 46(2). 147–152. https://doi.org/10.1016/s0738-3991(01)00150-1
17. Berenson, L.D., Goodill, S.W., & Wenger S. (2012). Standardized patient feedback: making it work across disciplines. *J Allied Health*. 41(1). 27E–31E.
18. Beullens, J., Rethans, J. J., Goedhuys, J., & Buntinx, F. (1997). The use of standardized patients in research in general practice. *Family practice*. 14(1). 58–62. https://doi.org/10.1093/fampra/14.1.58
19. Blake, K. & Greaven, S. (1999). Recruiting and following adolescent standardized patients. *Acad Med*. 74. 584.
20. Blake, K.D., Gusella, J., Greaven, S., & Wakefield, S. (2006). The risks and benefits of being a young female adolscent standardised patient. *Med Edu*. 40. 3–5.
21. Blake, K., Mann, K.V., Kaufman, D.M., & Kappelman, M. (2000). Learning adolescent psychosocial interviewing using simulated patients. *Acad Med*. 75. S56–S58.
22. Cassem, N.H., & Stewart, R.S. (1975). Management and care of the dying patient. *Int J Psychiatry Med*. 6. 293–304.
23. Cleland, J.A., Abe, K., & Rethans, J.-J. (2009). The use of simulated patients in medical education: AMEE Guide No 42. *Medical Teacher*. 31. 477–486.
24. Collins, J.P., & Harden, R. (1998). AMEE Medical Education Guide No. 13: real patients, simulated patients and simulators in clinical examinations. *Medical Teacher*. 20. 508–521.
25. Committee, I.S. (2016). INACSL Standards of Best Practice: Simulation SM professional integrity. *Clin Simul Nurs*. 12. S30–S3.
26. Cruess, S.R., Johnston, S., & Cruess, R.L. (2004). "Profession": a working definition for medical educators. *Teach Learn Med*. 16(1). 74–6.
27. Eagles, J., Calder, S., Wilson, S., Murdoch, J., & Sclare, P. (2007). Simulated patients in undergraduate education in psychiatry. *Psychiatric Bulletin*. 31(5). 187–190. doi:10.1192/pb.bp.106.010793
28. Feightner, J. W., Barrows, H., Neufeld, V., & Norman, G. (1977). Solving problems: How does the family physician do it? *Canadian Family Physician*. 23. 67–71.

29. Kretzschmar, R. M. (1978). Evolution of the Gynecology Teaching Associate: an education specialist. *American journal of obstetrics and gynecology*. 131(4). 367–373. https://doi.org/10.1016/0002-9378(78)90409-x
30. Lewis, K.L., Bohnert, C.A., Gammon, W.L., Hölzer, H., Lyman, L., Smith, C. ... Gliva-McConvey, G. (2017). The Association of Standardized Patient Educators (ASPE) Standards of Best Practice (SOBP). *Advances in Simulation*. 2. 10. doi: 10.1186/s41077-017-0043-4.
31. Linssen, T., Bokken, L., & Rethans, J.J. (2008). Return visits by simulated patients. *Medical education*. 42(5). 536. https://doi.org/10.1111/j.1365-2923.2008.03068.x
32. Linssen, T., van Dalen, J., & Rethans, J.J. (2007). Simulating the longitudinal doctor-patient relationship: experiences of simulated patients in successive consultations. *Medical education*. 41(9). 873–878. https://doi.org/10.1111/j.1365-2923.2007.02850.x
33. Moss, H., Weil, J., & Mukherji, P. (2022). Set Up and Execution of an Effective Standardized Patient Program in Medical Simulation. In: StatRearlis [Internet]. Treasure Island (FL) : StatRearlis Publishing.
34. Neufeld, V.R., & Barrows, H.S. (1974). The "McMaster philosophy": An approach to medical education. *Journal of Medical Education*. 49. 1040–1050.
35. Neufeld, V.R., Woodward, C.A., & Norman, G.R. (1983). Simulated patients in evaluation of medical education. 1983 Proceedings of the 22nd Conference on Research in Medical Education. 240–242.
36. Nursing AAoCo. (2002). Hallmarks of the professional nursing practice environment. *J Prof Nurs*. 18(5). 295–304.
37. Owen, A., & Winkler, R. (1974). General practitioners and psychosocial problems: An evaluation using pseudopatients. *The Medical journal of Australia*. 2(11). 393–398. https://doi.org/10.5694/j.1326-5377.1974.tb70862.x
38. Schmidt, H. (1983a). Letter to H. S. Barrows – 7 January 1983. Rotterdam : Private Archive Collection of H.G. Schmidt.
39. Schmidt, H., Majoor, G., & Wijnen, W. (1979). Introduction to the medical study. Maastricht : Maastricht University.
40. Slavin, R.E. (2008). Cooperative Learning, Success for All, and Evidence-based Reform in education. Éducation et didactique [Online]. 2–2 ; septembre 2008, Online since 01 September 2010, connection on 08 December 2020. URL: http://journals.openedition.org/educationdidactique/334, doi: https:// doi.org/10.4000/educationdidactique.334
41. Steinert, Y. (2012). Perspectives on faculty development: aiming for 6/6 by 2020. *Perspectives on Medical Education*. 1(1). 31–42.

42. Stillman, P.L., Sabers, D.L. & Doris, L. (1976). The Use of Paraprofessionals To Teach Interviewing Skills. *Redfield Pediatrics*. 57(5). 769–774. https://doi.org/10.1542/peds.57.5.769
43. Wampold, B.E., & Brown, G.S.(J.). (2005). Estimating variability in outcomes attributable to therapists: A naturalistic study of outcomes in managed care. *Journal of Consulting and Clinical Psychology*. 73(5). 914–923. https://doi.org/10.1037/0022-006X.73.5.914
44. Wilkes, L.M., & Wallis, M.C. (1998). A model of professional nurse caring: nursing students' experience. *Journal of advanced nursing*. 27(3). 582–589. https://doi.org/10.1046/j.1365-2648.1998.00557.x
45. Wilkes, M.S., Usatine, R., Slavin, S., & Hoffman, J.R. (1998). Doctoring: University of California, Los Angeles. *Academic medicine* : journal of the Association of American Medical Colleges. 73(1). 32–40. https://doi.org/10.1097/00001888-199801000-00009
46. Wind, L., van Dalen, J., Muijtjens, A., & Rethans J. (2004). Assessing simulated patients in an educational setting: The MaSP (Maastricht Assessment of Simulated Patients). *Medical Education*. 38. 39–44.

APPENDICES

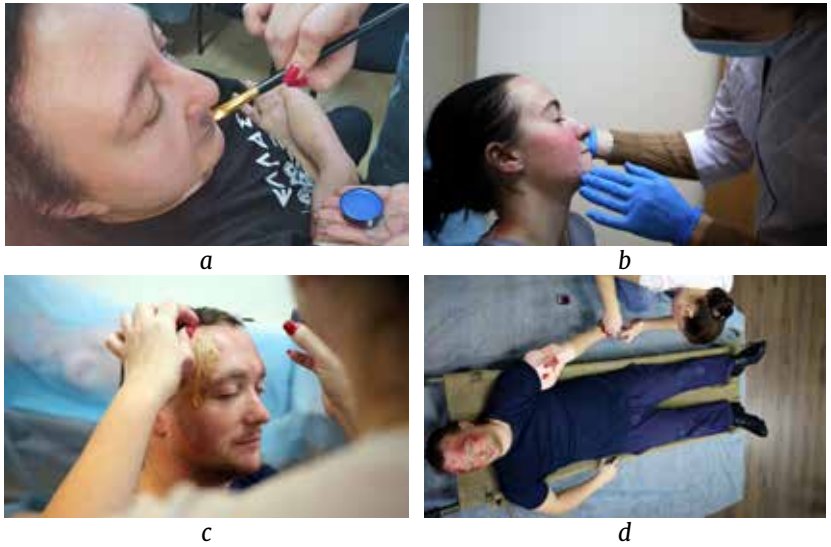
Appendix A

Additional Means of Simulation when Using a Simulated Patient

It is not possible to achieve full realism of clinical simulation, but it is possible to make it as realistic as possible. However, for this, as our experience shows, we use additional simulation tools in 70 % of cases. We divided them into several groups:

1. Makeup
2. Covers
3. Simulators

As for make-up, an ordinary theatrical make-up and a wig are most often used (Fig. A.A.1, *a*–*d*).



a *b* *c* *d*

Fig. A.A.1. Tanning of simulated patients (a–d)

However, in many cases this is not enough. Today, the arsenal of tools for SP make-up and making the simulation realistic is very wide – special exudation simulators, patches on the skin with imitation of burns, rash, abscess (even with the possibility of draining it), defecation in case of intestinal infections, or gastric bleeding, etc. (Fig. A.A.2). Today, make-up artists also cope with the task of simulating swelling quite easily due to silicone or foam pads (Fig. A.A.3).

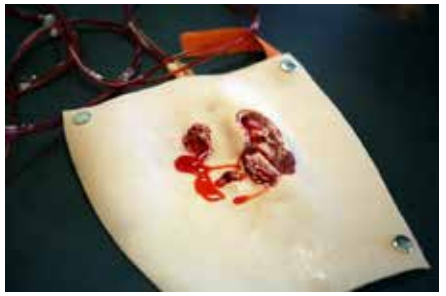


Fig. A.A.2. Tools for tanning of simulated patients

Fig. A.A.3. Imitation of cyanosis and edema

As for simulators, examples of their use are a simulator of a woman's small pelvis for a gynecological examination, or a man's pelvis for prostate palpation.

What can be simulated today:

- Bite (dog's, wasp's, snake's, etc.) (Fig. A.A.4)
- Blood (Fig. A.A.5)

- Black-and-blue spots and bruises (Fig. A.A.6)
- Cyanosis (see Fig. A.A.3)
- Scars (Fig. A.A.7)
- Erysipelas (Fig. A.A.8)
- Varicose veins of the lower extremities (Fig. A.A.9)

Fig. A.A.4. Imitation of dog's bite

Fig. A.A.5. Imitation of blood

Fig. A.A.6. Imitation of bruises

Fig. A.A.7. Imitation of a keloid scar

Fig. A.A.8. Imitation of erysipelas

Fig. A.A.9. Imitation of lower extremities varicosis

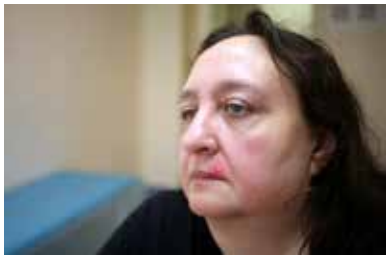
- Psoriasis (Fig. A.A.10, *a*, *b*)
- Herpes of the lips (Fig. A.A.11, *a*, *b*)
- External bleeding arrest (Fig. A.A.12, A.A.13, *a*, *b*)
- Systemic lupus erythematosus (Fig. A.A.14, A.A.15)

a

b

Fig. A.A.10. Imitation of psoriasis (a, b)

a



b

Fig. A.A.11. Imitation of upper lip sore (a, b)

Fig. A.A.12. The cover for external bleeding simulation

a

b

Fig. A.A.13. Manipulation of external bleeding arrest (a, b)

Fig. A.A.14. Tamming for systemic lupus erythematosus imitation

a

b

Fig. A.A.15. Systemic lupus erythematosus imitation (a, b)

- Abscess
- Burns/blisters
- Drainage/discharges
- Edema

- Feces
- Disruption
- Hematoma
- Intravenous treatment
- Lymph nodes
- Smells
- Postoperative suture
- Purulence
- Scratches and excoriations
- Sputum
- Sweat
- Tattoo
- Ulcer
- Urine
- Vomitting

Appendix Б

Plan of Creating a Simulation Scenario

Name _____

PART 1. THE SCENARIO AUTHORS

Scenario name	
Scenario authors	
The date when the original scenario was created	
A brief description	
Who has approved	
The view date	
The programs by which it will be used	
An approximate duration of the scenario	
An approximate duration of the discussion (debriefing)	

PART 2. LOGISTICS AND INFORMATION ABOUT PARTICIPANT

Task groups of education applicants (students of any course, interns, cadets)	
Place of simulation	
Needs in technical personnel	
Patient instructors	

PART 3. INTEGRATION INTO THE CURRICULUM

Educational goal of the scenario		
Tasks	1.	
	2.	
	3.	
	4.	
A brief description of the scenario		
Sources		

PART 3.1. PRECONDITIONS FOR CONDICTING THE SCENARIO

Basic knowledge/competencies of the applicant	
Knowledge	Skills

PART 4. NECESSARY SCENARIO COURSE AND EQUIPMENT

A. Introduction to the scenario (read aloud during the simulation)	
B. Role of actors and reality	
List of simulated scenario participants	
Patient	A simple simulated patient (actor) Standardized patient Dummy Hybrid simulation tools
Roles of participants in the scenario	A brief description of the roles
1.	
2.	
3.	
4.	
C. Monitoring at the beginning of the scenario	
1. Monitoring has already started 2. Monitoring must be initiated by the scenario participants	
D. List of indicators of vital activity, the control of which is involved in the scenario	

ECG: Non-invasive blood pressure: Pulse oximetry: Temperature: Defibrillator: Central vein: Artery: The other:	
E. Necessary equipment	
F. Mandatory pathological manifestations	
Cardiovascular	
Breath	
Abdominal	
Neurology	
Head-neck	
Skin	
The other	
I. Makeup	
G. Time	
Preparation:	
Scenario:	
Discussion:	
Total:	

PART 5. INFORMAION ABOUT THE PATIENT

Medical history			
First Name Last Name:	Age	Gender	Height and weight
Complaints:			
Anamnesis:			
Clinical manifestations			
Temperature Heart rate BP RR SpO_2 The other			
Allergy			
Family history			
Diseases	Medicines are used	Additional information	How will additional information be provided (dummy's voice, instructor, monitor)
Standardized patient:			

PART 6. SCENARIO PROCESS (interim assessment card)

Scenario stages, triggers of changing				
Indications of patients	The condition of the patient	Students' actions, triggers of changing		Teacher's notes
1. Initial stage Rhythm Heart rate BP RR SpO_2 Temperature		Expected (necessary) student actions 1. 2. 3. 4. 5.	Actions that matter: Triggers for moving to the next stage:	
2. Intermediate stage Rhythm Heart rate BP RR SpO_2 Temperature		Expected (necessary) student's actions 1. 2. 3. 4. 5.	Actions that matter: Triggers for moving to the next stage:	
3. The final stage Rhythm Heart rate BP RR SpO_2 Temperature		Expected (necessary) student's actions 1. 2. 3. 4. 5.	Actions that matter: Triggers for moving to the next stage:	

PART 7. DOCUMENTATION (CONSULTATIONS OF SPECIALISTS, EPICRISES, EXTRACTS FROM DISEASE HISTORIES), RESULTS OF LABORATORY, RADIOLOGICAL AND INSTRUMENTAL STUDIES

Laboratory findings	
X-ray photographs	
Video	

PART 8. SUMMING-UP

Discussion plan			
Individual	In group	With video	Without video
Methodology and tasks of the discussion			
Method			
The purpose of education			
Question for discussion			
1.			
2.			
3.			
4.			
Important points			
1.			
2.			
3.			
4.			
Conclusion, final assessment:			

NOTES

Навчальне видання

РОГАЧЕВСЬКИЙ Олександр Петрович,
ПЕРВАК Михайло Павлович,
ЄГОРЕНКО Ольга Сергіївна та ін.

СИМУЛЬОВАНИЙ ПАЦІЄНТ

Навчально-методичний посібник

Англійською мовою

За редакцією професора В. Г. Марічереда

Обкладинка – В. Савельєва
Верстка – І. Стратій

Підписано до друку 09.01.2023 р.
Формат 60x84/16. Папір офсетний.
Цифровий друк. Гарнітура Merriweather.
Ум. друк. арк. 5,7.
Наклад 500. Замовлення № 0423-026.

Видавництво та друк: Олді+
65101, м. Одеса, вул. Інглезі, 6/1
Тел.: +38 (095) 559-45-45
office@oldiplus.ua
Свідоцтво ДК № 7642 від 29.07.2022 р.

Замовлення книг:
+38 (050) 915-34-54, +38 (068) 517-50-33
book@oldiplus.ua